

2001-2003

Revised July 2001
to reflect the final 2001-2003
Washington State budget

Puget Sound Water Quality Work Plan



Prepared by the

PUGET SOUND WATER QUALITY ACTION TEAM

P.O. Box 40900 • Olympia, WA 98504-0900 • (800) 54-SOUND

Puget Sound Water Quality Action Team

The Action Team has 17 members: a city and a county representative; a representative of federally recognized tribes; ex-officio representatives of three federal agencies; the heads of 10 state agencies involved in carrying out the Puget Sound Management Plan and a chair appointed by the governor.

The Action Team:

- *Develops a biennial work plan and budget.*
- *Coordinates the monitoring and re-search programs.*
- *Periodically amends the Puget Sound Water Quality Management Plan.*
- *Coordinates implementation of the Puget Sound Management Plan.*

Nancy McKay
Chair

Chuck Booth
Mayor
City of Auburn

Francea McNair
Aquatics Steward
Department of Natural Resources

Donna Darm*
Acting Regional Administrator
National Marine Fisheries Service

Tom Fitzsimmons
Director
Department of Ecology

Ken Berg*
Manager
U.S. Fish and Wildlife Service

Jim Jesernig
Director
Department of Agriculture

Laura Eckert Johnson
Director
Interagency Committee for Outdoor Recreation

Jeffrey Koenings
Director
Department of Fish & Wildlife

Ron Kreizenbeck*
Acting Regional Administrator
U.S. Environmental Protection Agency

Steve Meyer
Executive Director
Washington State Conservation Commission

Louise Miller
Vice Chair
Metropolitan King County Council

Doug MacDonald
Secretary
Department of Transportation

Busse Nutley
Director
Office of Community Development

Cleve Pinnix
Director
Parks and Recreation Commission

Mary Selecky
Secretary
Department of Health

Daryl Williams
Director
Department of the Environment
Tulalip Tribes

* Non-voting member

Puget Sound Council

The Council has 12 members: seven appointed by the governor and four legislators. The Chair of the Action Team also chairs the Council.

The Council:

- *Advises the Action Team on work plan projects and activities, and on coordination with other state and local activities.*
- *Recommends changes to the Puget Sound Management Plan, as needed.*
- *Reviews progress on implementation of the work plan.*
- *Tracks the progress of state agencies and local governments in implementing the work plan.*

Nancy McKay
Chair

Jackie Aitchison
(Representing city government)
Poulsbo City Councilmember

Kirk Anderson
(Representing business)
Fisher Communications, Inc.

Representative Gary Chandler*
(R-Moses Lake)
Washington State House of Representatives

Bill Dewey
(Representing the shellfish industry)
Taylor Shellfish Co., Inc.

Senator Tracey Eide*
(D-Federal Way)
Washington State Senate

Rhea Miller
(Representing county government)
San Juan County Commissioner

Tom Putnam
(Representing the environmental community)
Puget Soundkeeper Alliance

Senator Pam Roach*
(R-Auburn)
Washington State Senate

Representative Phil Rockefeller*
(D-Kitsap)
Washington State House of Representatives

Jerry Van der Veen
(Representing agriculture)
Van der Veen Dairy

Fran Wilshusen
(Representing tribal governments)
Northwest Indian Fisheries Commission

* Non-voting member



STATE OF WASHINGTON
PUGET SOUND WATER QUALITY ACTION TEAM

OFFICE OF THE GOVERNOR
PO Box 40900 • Olympia, Washington 98504-0900
(360) 407-7300 • FAX (360) 407-7333

August, 2001

To: Persons interested in the 2001-2003 *Puget Sound Water Quality Work Plan*

We are pleased to present the *2001-2003 Puget Sound Water Quality Work Plan*. This work plan provides a blueprint for coordinating state, federal, tribal and local action during the 2001-2003 state biennium. As of July 2001, this work plan contains state agency actions only. In the coming months, Action Team staff will invite local and tribal governments and federal agencies to identify actions they will take during the biennium to implement the *Puget Sound Water Quality Management Plan*. Six priority issues are targeted in the 2001-2003 work plan:

- Contaminated sediment sites
- Nearshore habitat
- Salmon, ground fish, forage fish and other species at risk
- Shellfish beds
- Stormwater
- On-site sewage systems

In 2000, the Puget Sound Water Quality Action Team, in cooperation with the Puget Sound Council updated the *Puget Sound Water Quality Management Plan*. This work plan sets priorities and provides short-term guidance and resources to implement the revised management plan.

Both the revised long-term management plan and the biennial work plan are intended to more efficiently coordinate and focus activities where priorities have been identified by scientists, government and local citizens. We need the continued support and involvement of the Puget Sound community if we are to make and sustain improvements in the health of Puget Sound.

I want to thank everyone who helped develop these plans. We need and look forward to your partnership and support in implementing them.

Sincerely,

A handwritten signature in cursive script that reads "Nancy McKay".

Nancy McKay
Chair

Table of Contents

2001-2003 Puget Sound Water Quality Work Plan

Introduction	1
Summary of the 2001-2003 Work Plan Budget for State Agencies - Table 1	8
Actions to Protect and Restore Puget Sound During the 2001-2003 Biennium	9
Puget Sound Estuary Management.....	10
Marine and Freshwater Habitat Protection.....	13
Shellfish Protection.....	20
Stormwater and Combined Sewer Overflows.....	26
Municipal and Industrial Discharges	31
On-Site Sewage Systems.....	33
Local Watershed Plans	37
Aquatic Nuisance Species.....	40
Education and Public Involvement	44
Puget Sound/Georgia Basin Shared Waters.....	48
Spill Prevention and Response	53
Monitoring, Research and Laboratory Support	56
Agricultural Practices.....	62
Forestry Practices	64
Marinas and Boaters	66
Contaminated Sediments and Dredging.....	68
Final Budget for the 2001-2003 Puget Sound Water Quality Work Plan	74
Final Budget, by Agency—Table 2.....	75
Final Budget, by Program—Table 3	79
Implementers Index	81

Cover photography courtesy of Brian Walsh

If you need this document in an alternate format contact the Action Team at (360) 407-7300 or (800) 54-SOUND. Our TDD number is (800) 833-6388.
This work plan is also available on the Action Team's web site at: http://www.wa.gov/puget_sound.

Introduction

Protecting Puget Sound is more complex and challenging than ever. We have moved forward on a variety of issues, but new challenges continue to emerge and many existing problems persist as the region's population continues to grow. Many species, including some salmon, steelhead and bottomfish are at risk. Despite the restoration of thousands of acres of shellfish beds, shellfish from 25 percent of the Sound's commercial growing areas still are not safe to eat. Hundreds of homeowners have repaired or upgraded their on-site sewage systems, but with 10,000 new systems going in each year, local officials must work even harder to prevent future problems. Water pollution, losses of wetlands, accumulation of toxics and declines in populations of some species have left Puget Sound in major need of protection and restoration efforts.

This *2001-2003 Puget Sound Water Quality Work Plan* presents a two-year strategy to continue work to protect the Sound's health in the face of new and continuing problems. It builds on past efforts and focuses attention on the priority issues section starting on the next page.

The goals of this work plan are to achieve measurable improvements in Puget Sound over a two-year period and to continue implementing the *Puget Sound Water Quality Management Plan*. The management plan provides the framework for an ongoing comprehensive and coordinated approach to protect and restore the Sound.

The "Actions" sections of the August 2001 edition of this work plan identify actions that state agencies will take to protect and restore Puget Sound during the 2001-2003 biennium. Starting early in the 2001-2003 biennium, local and tribal governments and federal agencies will be invited to iden-

MILESTONES IN MANAGING THE HEALTH OF PUGET SOUND

1985—Puget Sound Water Quality Authority established.

1986—First *Puget Sound Water Quality Management Plan* developed.

1988—Puget Sound designated by the U.S. Environmental Protection Agency as an estuary of national significance, became part of the National Estuary Program.

1991— U.S. EPA approved the *Puget Sound Management Plan* as the federal Comprehensive Conservation and Management Plan.

1991 & 1994—*Puget Sound Management Plan* updated.

1996—Puget Sound Water Quality Protection Act passed, restructuring management of the estuary, replacing the Authority with the Puget Sound Water Quality Action Team and Puget Sound Council, and requiring biennial work plans to protect Puget Sound.

1996—First two-year work plan adopted.

1998—Second two-year work plan adopted.

1998—Legislature clarified Action Team's mandate to identify salmon recovery actions in the work plan.

2000—*Puget Sound Management Plan* updated.

2000—Third two-year work plan adopted.

tify actions they will take to implement this work plan. Their actions will be periodically added to the web version of this work plan at http://www.wa.gov/puget_sound.

When federal, tribal, state and local governments, and others implement this work plan, they will make a significant contribution to protecting and restoring the biological health and diversity of Puget Sound.

Structure of the Work Plan

This introduction provides background on preparation of the work plan, highlights actions to be taken on work plan priorities, and summarizes state agency work plan budgets. Actions for protecting Puget Sound start on page 10 and are divided into program sections corresponding to major pollution problems, resource issues and management tools. For each section, a brief introduction presents the goal and strategy of the program from the management plan, background information on the topic, and a summary of related state agency budgets.

Table 1 at the end of this Introduction provides a summary of state agency budgets adopted by the legislature for implementing the work plan in comparison to what the Action Team recommended. Tables 2 and 3 at the end of the work plan give a more detailed look at the legislative budget details to implement the work plan by agency and program grouping.

Preparing the Work Plan

The Puget Sound Water Quality Action Team developed this work plan and budget with advice from the Puget Sound Council. Biennial work plans and budgets are based on the management plan and other ongoing activities and plans.

Preparation of this work plan began in December 1999 through consultations with local and tribal governments and state agencies. In February 2000, the Action Team adopted priorities for action (see below). In July, state agencies submitted their actions and related budget needs to implement the work plan. A draft work plan was released on July 31. The August 2001 edition of the work plan incorporates the Puget Sound Council's and Action Team's response to public comments and the final 2001-2003 state budget.

Local Issues and Current Scientific Findings

In developing priorities for this work plan, the Puget Sound Council and the Action Team considered recent scientific findings. The Puget Sound Ambient Monitoring Program, coordinated by the Action Team (or the former Puget Sound Water Quality Authority) since 1987, collects and communicates information about the condition of Puget Sound. The recent findings of this program and other investigations are presented in two reports released by the Action Team in 2000—the *2000 Puget Sound Update* and *Puget Sound's Health 2000*. The reports provide scientific evidence that some aspects of Puget Sound's health are improving. However, they also show that the Sound continues to suffer many damaging effects from the region's growing human population.

Improvements over the past several years in the condition of Puget Sound and its natural resources include steady or increasing populations of some organisms and decreases in some toxic contami-

nants in a few areas. Harbor seals and many species of marine birds are doing well, and their numbers are growing. Some contaminants in mussel tissue have decreased at some locations from levels measured in the 1970s and 1980s, indicating a decline in the concentrations of contaminants in the waters of Puget Sound.

Evidence of continued environmental problems for Puget Sound includes the poor or declining condition of a wide variety of marine organisms. Many continuing problems relate to changes our society has made to the physical environment and contamination of the environment by toxic chemicals, pathogens and excess nutrients. Marine organisms in poor or declining condition in Puget Sound include many species of bottomfish, salmon, herring and marine invertebrates.

Priority Issues for the 2001-2003 Work Plan

The challenge for this work plan is to address important issues that require immediate action while preserving the fragile gains made across the spectrum of water quality issues.

Identifying an issue as a priority means the Action Team and Puget Sound Council recommend focusing additional work and resources to achieve measurable results during the 2001-2003 biennium.

This does not mean work on other efforts should stop—it is important to continue addressing all issues facing the Sound.

The work plan contains actions that continue to implement important programs in the *Puget Sound Management Plan*, including monitoring and research, agriculture and forestry, spills, municipal and industrial discharges, and contaminated sediments and dredging. The work plan also includes ongoing agency actions that are essential to hold the line on our current successes.

The following is a description of each priority and highlights of actions that state agencies will work on during the 2001-2003 biennium:

► CONTAMINATED SEDIMENT SITES

Priority: Governments and interested entities should work with responsible parties to remediate contaminated sediment sites and to prevent recontamination.

HIGHLIGHTS OF ACTIONS

- State and federal agencies and tribal and local governments will cooperate on the Bellingham Bay Demonstration Pilot Project to clean up contaminated sediments and restore and enhance aquatic habitats.
- State and federal agencies will coordinate policies for cleaning up sediments as part of the Cooperative Sediment Management Program.
- State and federal agencies and ports will collaborate to develop a multi-user site for treatment or disposal of contaminated sediments.
- Department of Ecology will develop guidance to carry out the Sediment Management Standards.

► NEARSHORE HABITAT

Priority: Local governments should update their shoreline master programs to reflect best available science to better protect the nearshore environment. State agencies should provide guidance, technical assistance and funding to local governments. Tribal governments are encouraged to provide technical and program support to these efforts as they relate to the protection of habitat for fish and shellfish.

HIGHLIGHTS OF ACTIONS

- Ecology will provide technical assistance guidance materials, and training to local governments to support updating of their Shoreline Master Programs.
- The Office of Community Development (OCD), in cooperation with other state agencies and the Planning Association of Washington, will conduct a short course on local planning on the Growth Management Act, the Shoreline Management Act and the management plan.
- The Department of Natural Resources will disseminate information on nearshore habitat that local governments can use in updating their shoreline master programs.
- The Action Team support staff will coordinate the development of a strategy for conducting local inventories of habitat.
- University of Washington Sea Grant will work with the Washington Coastal and Shoreline Planners Group to develop educational programs about habitat for salmon and shellfish.

Priority: Governments and landowners should restore and protect habitat along the nearshore fringe of Puget Sound to improve conditions for out-migrant salmon, spawning forage fish and other species. Habitat protection should include: minimizing the use of shoreline stabilization structures; promoting the use of “soft” stabilization techniques; and strengthening programs for land acquisition and preservation. State and federal agencies and tribal governments should provide guidance and research on new technologies. State and federal agencies should provide funding and hands-on workshops to demonstrate the effectiveness of softer armoring approaches.

HIGHLIGHTS OF ACTIONS

- Ecology will continue to implement a watershed-based program to restore wetlands.
- The Action Team support staff will coordinate and provide technical assistance to local planning groups on habitat restoration and protection.
- The Action Team support staff will coordinate the activities of the work group on nearshore habitat loss.
- The Washington Department of Fish and Wildlife will monitor for the presence of green crab.
- The Department of Agriculture will coordinate a program to control the spread of spartina and purple loosestrife.
- Fish and Wildlife, other agencies, ports, and community and business groups will develop and implement a ballast water management program for vessels entering Puget Sound and state waters.

- Natural Resources will disseminate information on nearshore habitat that can be helpful in characterizing nearshore lands for acquisition and preservation efforts.

► SALMON, GROUND FISH, FORAGE FISH AND OTHER SPECIES AT RISK

Priority: Local governments should protect salmon habitat by adopting and enforcing fish-friendly zoning, critical areas ordinances and stormwater and shoreline management programs. State agencies and tribal governments should provide guidance and technical assistance to local governments.

HIGHLIGHTS OF ACTIONS

- Ecology will develop and update technical assistance materials on wetlands protection and will help local governments plan and administer programs to protect wetlands.
- Washington State Department of Transportation (WSDOT) will implement projects to remove barriers to fish passage identified in an inventory prepared by Fish and Wildlife.
- The Office of Community Development will provide funding to local governments for updating local critical areas ordinances.
- All agencies will coordinate relevant aspects of their Puget Sound work plan efforts with the state salmon recovery strategy.

Priority: Government agencies and interested entities and groups should develop and implement conservation and recovery plans to protect and restore Puget Sound's ground fish, forage fish, salmon, and other species at risk and also promote incentives for voluntary restoration and enhancement of habitat. State and federal agencies and tribal governments—as fisheries co-managers—should provide data on at-risk species, guidance, technical assistance and funding to support development and implementation of these plans.

HIGHLIGHTS OF ACTIONS

- WSDOT will remove barriers to fish passage and support standardized design for the department's barrier removal projects and grant programs.
- WSDOT will provide technical support for recovery planning and develop a pilot mapping and field identification system for roadside areas that contain threatened and endangered salmon, animals and plants.
- The University of Washington Sea Grant and Washington State University Cooperative Extension will provide technical assistance, education and information for groups working to protect and restore salmonids and shellfish habitat.

Priority: Government agencies, working in coordination with interested groups and entities, should establish marine protected areas and reserves, using both voluntary and regulatory approaches, to protect and restore at-risk species.

HIGHLIGHTS OF ACTIONS

- Fish and Wildlife will develop and implement three to four marine protected areas (MPAs) in partnership with local governments and tribes.
- The Action Team support staff will work with Fish and Wildlife, Natural Resources, State Parks, tribal governments and non-governmental organizations to: develop criteria and standards for marine protected areas; coordinate research efforts relevant to marine protected areas; identify gaps in marine protection Soundwide; and designate marine protected areas.

► SHELLFISH BEDS

Priority: Local governments should designate shellfish growing areas as critical areas under the state Growth Management Act and as areas of special concern under the state on-site sewage regulations. Local and tribal governments should adopt measures to manage growth and to prevent pollution from failing on-site sewage systems, urban runoff, animal wastes and other sources. State agencies and tribal governments—as fisheries co-managers—should provide guidance and technical assistance.

HIGHLIGHTS OF ACTIONS

- State agencies, universities and others will work to: assess actions needed to protect shellfish; protect and restore water quality in shellfish areas; enhance opportunities to harvest shellfish; and prevent the consumption of contaminated shellfish.

- OCD will develop a list of scientific references so cities and counties have access to the best available science in developing policies and regulations to protect critical areas. OCD will provide other technical assistance and track final adoption of local policies and development regulations intended to protect critical areas.
- Department of Health will develop and distribute guidance to help local health jurisdictions establish areas of special concern and to raise public awareness of the proper use and maintenance of on-site sewage systems.
- Health will monitor water quality, assess pollution sources, identify and monitor corrective actions, establish harvest classifications and provide technical assistance to protect and restore shellfish areas.
- Ecology will carry out the 1998 Dairy Nutrient Management Plan to reduce pollution from dairy operations. Ecology will provide technical assistance, register farms, identify potential pollution sources, conduct inspections and ensure compliance with GMA.
- Ecology will identify waters that do not meet water quality standards and complete water cleanup plans according to a 15-year schedule.
- Washington Sea Grant and Washington State University Cooperative Extension will provide technical assistance and education to protect water quality and aquatic habitats.
- Action Team support staff will continue to provide technical assistance to local governments and to participate on interagency shellfish protection and restoration committees.

Priority: Local governments should promptly address threats to shellfish beds that are identified by the state Department of Health's early warning system. Local governments should apply all available resources to address threats, including emergency financial and regulatory measures. State agencies should provide guidance and technical assistance to local governments.

HIGHLIGHTS OF ACTIONS

- Health will identify and address declines in water quality in shellfish growing areas prior to issuing downgrades in classification of beds and will distribute data on the condition of growing areas and trends in fecal coliform.
- Ecology and Action Team support staff will assist with the early warning system and strategies to protect and restore threatened and downgraded shellfish beds.
- Ecology will oversee implementation of the Nonpoint Source Pollution Plan and provide technical and financial assistance to local and tribal governments for programs to control sources of nonpoint pollution.
- Washington Sea Grant will provide technical assistance, local coordination and education to protect and restore shellfish beds.
- The Action Team support staff will provide information to local governments on funding sources.

► STORMWATER

Priority: Local governments should adopt and implement stormwater programs as defined in the *Puget Sound Water Quality Management Plan*. State agencies should provide guidance and technical assistance and funding to local governments.

HIGHLIGHTS OF ACTIONS

- Ecology will provide technical assistance to help cities and counties develop effective programs to manage stormwater.
- The Action Team support staff will provide technical assistance to local communities and convene periodic meetings to coordinate regional assistance to local governments on stormwater.

Priority: State and local governments should identify and remove impediments to and provide incentives for use of low impact development techniques that minimize or eliminate runoff. State agencies should provide guidance and technical assistance to local governments.

HIGHLIGHTS OF ACTIONS

- The Action Team support staff will work with businesses, agencies and others to promote the understanding and use of low impact development practices.
- Washington State University will provide technical and educational assistance to local governments on innovative stormwater management practices (action is highlighted in the Education and Public Involvement Program).

► ON-SITE SEWAGE SYSTEMS

Priority: Local governments should adopt and implement operation and maintenance programs for on-site sewage systems. State agencies should provide guidance and technical assistance to local governments.

HIGHLIGHTS OF ACTIONS

- Health will provide technical assistance, guidance and support to help local health departments develop effective operation and maintenance programs.
- University of Washington Sea Grant and Washington State University Cooperative Extension will provide technical assistance and education on maintaining and monitoring on-site sewage systems.
- Action Team support staff will help local health departments develop effective operation and maintenance programs for on-site sewage systems.

How the Work Plan Relates to Other Protection Efforts

The *Puget Sound Management Plan's* programs complement other important federal, tribal, state and local government efforts to protect water quality and biological resources. These include managing growth, protecting threatened species and managing watersheds. The Action Team helps coordinate approaches, activities and funding among these initiatives.

Members of the Action Team representing state agencies are also members of the Joint Natural Resources Cabinet, which coordinates the state's response to threatened species of salmon statewide. Many of the activities in the work plan that support salmon recovery are called for by the state plan for recovering salmon, developed by the Governor's Salmon Recovery Office and the Joint Natural Resources Cabinet.

This work plan is being adopted at a time when all levels of government are making unprecedented efforts to protect and restore the environment. Because these initiatives are evolving, the links among them are still being developed.

Many new watershed plans are being initiated under the Watershed Planning Act (Chapter 247, Laws of 1998). These plans should incorporate past work in these watersheds, including plans developed under Chapter 400-12 WAC, the Non-point Rule.

Salmon restoration projects are being carried out in many watersheds under the Salmon Recovery Act (Chapter 246, of 1998) with funding provided by the Salmon Recovery Funding Board. An analysis of limiting factors in each watershed is part of these efforts. These analyses review all available information in developing conclusions. In addition, other initiatives may benefit from the data generated by the limiting factors analyses. The Puget Sound Shared Strategy is working to

ensure that local governments, watershed and marine waters groups, and private sector representatives work together with tribal, state, and federal agencies to develop a salmon recovery plan for Puget Sound. It links local governments, watershed groups, and others to the critical process of identifying how to achieve salmon recovery goals by establishing a forum to discuss on-the-ground watershed and marine waters efforts and important policy initiatives. This work plan contains many actions that contribute to salmon recovery. As additional actions to recovering salmon are identified through the Shared Strategy effort, they can be supported in future work plans.

Congress has authorized and funded through the Northwest Straits Initiative, an effort to protect and restore natural resources in northern Puget Sound. The work is coordinated through the 13-member Northwest Straits Commission (NWSC), which is composed of seven county representatives (one from each of the seven counties' Marine Resource Committees, or MRCs), five Governor appointments (including a member from the Action Team) and one tribal member appointed by the Secretary of the Interior.

The NWSC provides oversight and technical assistance to MRCs, integrates science, coordinates funding, and reviews projects carried out by the MRCs. Progress is measured against benchmarks, which relate to resource recovery, water quality, nearshore habitat, shellfish growing area restoration and protection and education in the seven-county area. One round of projects are underway and another round of proposals for each of the seven MRCs are in review. Common themes for these projects include: recovery plans for bottomfish; establishing voluntary marine protected areas; mapping of eelgrass and other important marine nearshore habitats; monitoring forage fish spawning areas; and education and public involvement.

Local Government Funding for Puget Sound

Local governments contribute a significant portion of the total funds used to restore and protect Puget Sound. Many of the programs in the work plan depend on local implementation. Early in the biennium, the Action Team will invite local governments to identify projects they will take to implement this work plan.

The estimated total cost for all local projects in the 1999-2001 work plan was \$469 million. Of this figure, \$190 million was identified as purely local costs; the balance was split among local, state and federal costs. However, the work plan did not include cost estimates for every local government project. Therefore, the \$190 million was a very low estimate of total local expenditures. This figure illustrates the major commitment local governments are making to protect and restore Puget Sound and, in turn, the scale of local governments' needs for new and enhanced sources of funding.

Tribal Government and Federal Agency Funding

Tribal governments and federal agencies also contribute significant funding and resources to protect and restore Puget Sound. As mentioned above, the Action Team will contact tribal governments and federal agencies early in the 2001-2003 biennium to identify actions they will take to implement this work plan.

State Agency Budget Summary

State funding for restoration, technical assistance, resource management, pollution control and stewardship training is critical to the future health of Puget Sound.

Action Team agencies' budgets include state expenditures of \$86,678,632 to protect and restore the Puget Sound basin during the 2001-2003 biennium. Of this total, \$30,833,632 is provided in the state budget to be used solely for implementing the Puget Sound work plan.

This work plan budget might appear to be a significant amount of funding, but it does not fully fund all the actions necessary to protect water quality and habitat as outlined in the *Puget Sound Water Quality Management Plan*. It focuses on maintaining momentum on important management issues and adding strategic enhancements to address key priorities.

Many actions in this work plan support the critical goals of restoring salmon runs and implementing watershed plans. As directed by the legislature in 1998, these relationships are indicated in the righthand column on the tables of actions.

Table 1 summarizes expenditures for continuing state agency actions and enhancements. Tables 2 and 3 at the end of the work plan describe, by agency and by program, the detailed state budget to implement the work plan.

Table 1. Summary of the 2001-2003 Work Plan Budget for State Agencies

Agency	Continued 1999-2001 Proviso Funds	Action Team Recommendations for 2001-2003		Final Budget Provisos for 2001-2003		Non-Proviso Funds Reported by Agencies
		Adjustment	Total	Adjustment	Total	
Agriculture	\$73,000		\$73,000		\$73,000	
Office of Community Development	\$123,000	\$2,400,000	\$2,523,000		123,000	
Conservation Commission	\$494,000	\$840,000	\$1,334,000	\$840,000	\$1,334,000	
Ecology	\$13,839,000	\$14,204,362	\$28,043,362	\$2,599,359	\$16,438,359	\$48,000
Fish and Wildlife	\$3,599,323	\$1,755,000	\$5,354,323	\$(235,600)	\$3,363,723	
Health	\$3,411,000	\$(60,000)	\$3,351,000	\$(60,000)	\$3,351,000	
Natural Resources	\$1,033,550		\$1,033,550		\$1,033,550	
Puget Sound Action Team	\$4,109,000	\$1,000,000	\$5,109,000	\$18,000	\$4,127,000	
State Parks	\$189,000		\$189,000		\$189,000	\$525,000
Transportation						\$55,272,000
University of Washington	\$470,000	\$300,000	\$770,000		\$470,000	
Washington State University	\$331,000	\$300,000	\$631,000		\$331,000	
Total	\$27,671,873	\$20,739,362	\$48,411,235	\$3,161,759	\$30,833,632	\$55,845,000

Actions to Protect and Restore Puget Sound During the 2001-2003 Biennium

ABOUT THE ACTIONS

The following sections of this report describe the actions that state agencies propose to take to protect and restore Puget Sound during the 2001-2003 biennium. The sections correspond with programs from the *2000 Puget Sound Water Quality Management Plan*.

The first page of each section includes an introduction that describes goals and strategies from the management plan (if applicable), background and trends, highlights of actions to be taken during the 2001-2003 biennium, and a recommended budget for state actions.

State agencies proposed the actions on the following pages. Each action includes an anticipated outcome or result.

Budget Code: This column is used only for state agency actions and indicates the budget category that supports the action. Budget categories and related amounts and fund sources are listed in Table 2 at the end of the work plan. Entries show the agency initials followed by a number, such as DFW-17 for Department of Fish and Wildlife budget item number 17. A zero after the agency initials indicates that the budget for the action is not included in this work plan.

PS Plan Element: In some entries, the program element is shown as a "0," as in "SP-0." This indicates that the action is not specifically mentioned in the *Puget Sound Water Quality Management Plan* but is consistent with program goals or strategies.

Guide to PS Plan program abbreviations:

AG	Agricultural Practices
ANS	Aquatic Nuisance Species
EMP	Estuary Management & Plan Implementation
EPI	Education & Public Involvement
FP	Forestry Practices
MB	Marinas & Recreational Boating
M0N	Monitoring, Research and Laboratory Support
OS	On-Site Sewage
MI	Municipal & Industrial Dischargers
SED	Contaminated Sediments
SF	Shellfish Protection
SP	Spills Prevention & Response
SW	Stormwater and Combined Sewer Overflows
WABC	Puget Sound/Georgia Basin Shared Waters
WET	Marine and Freshwater Habitat Protection
WP	Local Watershed Plans
SDPA	State Drought Preparedness Account

Salmon: A check indicates the project is designed primarily to protect and restore salmon habitat.

Nonpoint: A check indicates that the project originates from the planning process described in Chapter 400-12 WAC.

Priority: A check indicates that the project responds to one or more of the Action Team's priorities for the 2001-2003 biennium (see page 2.)

	Pri- ori- ty	Non- point	Sal- mon	Budget Code	PS Plan Element	Action ID
	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOE-08	W-2	635
etlands s are shed problems	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOE-08	W-7	634
possible thomish Basins.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOE-08	W-8	633

Action ID: Numbers in this column will be used by the Action Team to track and report on actions.

Puget Sound Estuary Management

Puget Sound Management Plan Goal

- To protect and restore Puget Sound through effective coordination among governments and private interests, and through use of an adaptive management approach.

Strategies for Achieving the Goal

- Maintain, evaluate and update the *Puget Sound Water Quality Management Plan* as needed.
- Develop and implement Puget Sound work plans each biennium.
- Require accountability by implementing agencies.
- Evaluate the effectiveness of the biennial work plans in meeting the goals of the management plan.
- Obtain adequate funding to implement the management plan and work plans.
- Provide technical assistance for implementers.
- Provide strong enforcement of all relevant environmental laws.
- Ensure that federal activities are consistent with the intentions of the management plan.

Background and Trends

The *Puget Sound Water Quality Management Plan* provides the framework for managing and protecting Puget Sound. Every two years, the

Puget Sound Water Quality Action Team develops work plans—based on the *Puget Sound Management Plan*—and the Council oversees their implementation. The Action Team and Council identify priorities for actions to protect the Sound and its resources. These actions are carried out by federal, tribal, state and local governments and others.

Adequate funding is crucial for protecting Puget Sound. The Action Team advocates full funding for existing federal and state programs that provide grants and loans to protect the Sound. The Action Team also advocates enhancing the capacity of local jurisdictions to raise their own funds.

The *Puget Sound Management Plan* is also the state's Comprehensive Conservation and Management Plan (CCMP) for Puget Sound. The CCMP is authorized by the federal Clean Water Act. As a CCMP, the plan addresses federal actions affecting Puget Sound. Under the Clean Water Act, the Puget Sound CCMP is supported, in part, by federal technical and financial assistance.

Highlights of 2001-2003 Actions

- The Action Team support staff will prepare the *2003-2005 Puget Sound Water Quality Work Plan*.
- The Action Team support staff will evaluate successes and shortcomings for the 2001-2003 work plan.

- Implementation of the *2000 Puget Sound Water Quality Management Plan* will be evaluated through the use of program measures, case studies and trends in environmental indicators.

2001-2003 Budget for State Actions

Total Provided Funding	\$1,391,452
------------------------	-------------

		See page 9 for key.					
JOINT STATE AND FEDERAL ACTIONS	OUTCOMES	Pri- ori- ty	Non- point	Sal- mon	Budget Code	PS Plan Element	Action ID

The Puget Sound Action Team recommends that agencies which administer grant and loan programs should give priority, to the extent possible under statutory requirements, to actions identified in the work plan.

JOINT OUTCOME

	Funding will be directed to implement work plan actions.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	JO-0	EM-4	1
--	--	-------------------------------------	--------------------------	-------------------------------------	------	------	---

		See page 9 for key.					
STATE AGENCY ACTIONS	OUTCOMES	Pri- ori- ty	Non- point	Sal- mon	Budget Code	PS Plan Element	Action ID
PUGET SOUND WATER QUALITY ACTION TEAM							
Coordinate implementation of the work plan.	Implementers will understand relationships among work plan programs and related programs. The Action Team, Puget Sound Council and other groups will meet to oversee implementation.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PSAT-01	EM-1	5
Prepare the "2003-2005 Puget Sound Water Quality Work Plan." Identify priorities and critical next steps. Involve the Action Team and Council in key decisions. Involve governments, interested parties and the public in preparing the plan and coordinate planning with other relevant initiatives.	The "2003-2005 Puget Sound Water Quality Work Plan" will be prepared and submitted to the governor and legislature.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PSAT-01	EM-1	6
Develop benchmarks and goals for the Action Team's performance measures. Update performance measures annually.	The legislature and public will be better informed about short and long-term performance in protecting and restoring Puget Sound. The Action Team will more effectively target and improve programs to protect and restore Puget Sound.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PSAT-01	EM-1	7
Evaluate successes and shortcomings of the 2001-2003 work plan. Prepare a final progress report for the 1999-2001 work plan and a first year of progress report for the 2001-2003 work plan. Provide feedback to those implementing the work plan. (These tasks are assigned to the Puget Sound Council.)	Implementation of the work plan will be improved.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PSAT-01	EM-1	8
Update the "2000 Puget Sound Water Quality Management Plan" as needed.	Goals, strategies and elements will be reviewed and revised in a timely manner. The "Puget Sound Management Plan" will be coordinated with biennial work plans and other relevant initiatives. Governments, interested parties and the public will be involved in the update.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PSAT-01	EM-1	9
Support development of state and federal environmental policies, programs and regulations that protect Puget Sound. Provide technical assistance to help implementing agencies use best available science in implementing this work plan.	Policies, programs and regulations will be improved to better protect Puget Sound and its biological resources.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PSAT-01	EM-1	10
Evaluate implementation of the "Puget Sound Management Plan" through use of program measures, case studies and trends in environmental indicators.	Implementation and effectiveness of the plan will be evaluated.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PSAT-01	EM-3	11

Marine and Freshwater Habitat Protection

Puget Sound Management Plan Goals

- To preserve, restore and enhance the ecological processes that create and maintain marine and freshwater habitats and to achieve a net gain in ecological function and area of those habitats within the Puget Sound basin.

Strategies for Achieving the Goals

- Develop comprehensive local programs to protect marine and freshwater habitats that include planning, stewardship, education and regulation.
- Improve regulatory program practices and scientific knowledge of marine and freshwater habitats.
- Educate the public.
- Create and maintain an accurate accounting of habitat gains and losses as a result of permitting actions.
- Preserve remaining natural marine and freshwater habitats.
- Measure progress through performance measures and adjust programs as needed.
- Pursue funding for implementation of the management plan and related activities from all available federal, state and local government and private sources.

Background and Trends

More than 175 species of fish and wildlife feed and breed in wetlands. At least one-third of Washington's threatened and endangered species require healthy wetlands for survival. Since the arrival of settlers in the Puget Sound basin, 70 percent of tidally influenced wetlands have been lost, largely due to urbanization, port development, industrial use, dredging and filling.

The declining condition of Puget Sound's habitat is reflected in the listing of two species of salmon in Puget Sound as threatened under the Endangered Species Act. Several other marine species are experiencing declining populations. Human activities and non-native plants continue to degrade wetlands along the Sound's shoreline and rivers.

Local regulations for shoreline development are outdated. They do not adequately protect nearshore habitat nor address the cumulative effects of shoreline development.

Highlights of 2001-2003 Actions

- The Department of Fish and Wildlife will develop and implement three to four marine protected areas (MPAs) or marine sanctuaries in partnership with local jurisdictions and tribes
- Ecology will facilitate restoration of degraded wetlands by implementing a watershed-based program to restore wetlands.
- The Washington State Department of Transportation will implement watershed-based strategies for environmental mitigation,

flood management and compliance with environmental permits.

- The Action Team support staff will coordinate and provide technical assistance on habitat restoration and protection to the Northwest Straits Commission, associated Marine Resource Committees and other local groups.
- The University of Washington will provide technical assistance, education and information for groups working to protect and restore salmonids and shellfish habitat.

2001-2003 Budget Reductions

- Fish and Wildlife: A \$235,600 reduction eliminated wetlands technical assistance for local governments.

2001-2003 Budget for State Actions

Reduction	(\$235,600)
Total Provisoed Funding	\$2,645,504
Non-provisoed Funding	\$18,000,000

		See page 9 for key.					
JOINT STATE AND FEDERAL ACTIONS	OUTCOMES	Pri- ori- ty	Non- point	Sal- mon	Budget Code	PS Plan Element	Action ID
<p>Provide funding to local governments to support updates to local critical areas ordinances. The Action Team support staff will help publicize the availability of and encourage the use of these funds to better protect habitat and shellfish. The Action Team support staff will also provide technical assistance to help local governments incorporate "best available science" into their critical areas ordinances.</p>							
OFFICE OF COMMUNITY DEVELOPMENT							
	Local critical areas ordinances will be revised and improved.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	OCD-02	MFH-2	15
PUGET SOUND WATER QUALITY ACTION TEAM							
	Local critical areas ordinances will be revised and improved.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	PSAT-03	MFH-2	15

		See page 9 for key.					
STATE AGENCY ACTIONS	OUTCOMES	Pri-ori-ty	Non-point	Sal-mon	Budget Code	PS Plan Element	Action ID
DEPARTMENT OF FISH AND WILDLIFE							
Provide technical assistance to local jurisdictions on water quality, marine development and stormwater management.	Local governments will receive help on the following issues: assistance with Hydraulic Project Approvals; training on the Stream Bank Protection Guidance Manual; early identification of Fish and Wildlife concerns about proposals for major marine projects; protection of water and sediment quality and habitat issues related to aquatic toxicants and pesticides; and implementation of watershed plans developed under Chapter 400-12 WAC (the Nonpoint Rule).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DFW-03	MFH-0	18
Provide locally based technical assistance on water quality and habitat. Support consideration of fish and wildlife needs in local planning processes and actions. Assist the development and implementation of watershed plans (including the Chapter 400-12 WAC plans), growth management ordinances, shoreline master programs, and related salmon recovery activities and projects.	Coordination between Fish and Wildlife and local planning staffs and action groups will be improved. Fish and Wildlife staff will participate in local meetings, hearings and actions and support implementation of local watershed plans. Regional support activities will be better coordinated with local and Soundwide actions (stormwater, water quality, wetlands, fish passage). Technical support will be provided for salmon recovery planning.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DFW-05	MFH-2	20
Develop and implement three to four marine protected areas (MPAs) or marine sanctuaries. Evaluate potential sites and criteria for regional management plans and provide evaluation to determine success. Provide public outreach and develop partnerships with local jurisdictions, tribes and others to establish and manage these sites at the local level.	Local marine protected areas and regional management plans will be developed. Public understanding and support for marine protected areas, the educational and non-consumptive use opportunities they provide and opportunities to rebuild marine stocks will be enhanced. Local involvement, ownership and direct actions toward rebuilding and protecting depressed marine fish stocks will be facilitated.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DFW-07	MFH-8	21
Develop technical guidelines for marine and stream corridor habitat protection and restoration, and integrate with related standards and rules at other levels of government. Implement technical outreach and training. Subjects covered include marine shoreline modification and restoration, estuary restoration, marine overwater structures, aquaculture, aquatic weeds management, conduit crossings and outfalls, etc. (Budget enhancement requested.)	Technical guidelines for marine and stream corridor habitat protection and restoration will be developed. A program for training and outreach will be initiated to provide technical assistance to local, state and federal regulatory agencies, engineers and project designers, volunteer habitat restoration groups, and other members of the public. Salmon recovery will be enhanced, and federal review under the ESA will be streamlined for projects using the guidelines.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DFW-10	MFH-7	22
DEPARTMENT OF NATURAL RESOURCES							
Continue site visits by regional personnel and volunteers to Daily Prairie, Kings Lake Bog, Snoqualmie Bog and Bald Hills Lake. Increase the level of hydrologic monitoring at these sites and assess wetland functions (using Ecology's Wetlands Functions and Values Assessment Protocol).	Wetland sites in the Puget Sound trough will be protected.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DNR-02	MFH-4.1	23

		See page 9 for key.					
STATE AGENCY ACTIONS	OUTCOMES	Pri-ori-ty	Non-point	Sal-mon	Budget Code	PS Plan Element	Action ID
DEPARTMENT OF ECOLOGY							
Assist local governments in updating their shoreline master programs. Provide technical assistance guidance materials, training opportunities and one-on-one support to communities updating their shoreline master programs. Review and approve shoreline master programs as they are submitted to Ecology.	Technical assistance guidance materials, trainings and one-on-one support provided to communities will result in updated local Shoreline Master Programs. Shoreline Master Programs will be reviewed and approved as they are submitted to the agency.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOE-08	MFH-2	24
Facilitate the restoration of degraded wetlands by implementing a watershed-based program to restore wetlands. Complete and implement the program in the Snohomish Basin. Begin implementing the program in the Skagit and Dungeness Basins (tentatively). Continue to maximize restoration in the Stillaguamish, Nooksack and Snohomish basins. Continue to assist local governments in the planning and implementation of restoration and monitoring projects, including Spencer Island, Drainage District 6, Quuloolt Project (Snohomish), and McElroy Slough (Skagit).	A database of wetlands restoration sites will be developed for the Skagit and Dungeness basins. Wetlands in the Stillaguamish, Nooksack and Snohomish basins and elsewhere will be restored.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOE-08	MFH-2	25
Facilitate better stewardship of wetlands by developing and updating technical assistance materials and providing specialized technical assistance to local governments on non-regulatory protection of wetlands. Provide assistance on the use of stewardship tools to protect salmon. Administer grants and participate in site-specific preservation/restoration activities.	Local governments will be more aware of stewardship tools to protect wetlands. Local preservation programs will be designed to more effectively address watershed problems. Key wetland sites will be preserved.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOE-08	MFH-2	26
Assist local governments in planning and administering wetlands protection programs.	Local government actions to protect and restore wetlands will be improved.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOE-08	MFH-2	27
WASHINGTON STATE DEPARTMENT OF TRANSPORTATION							
Monitor wetland sites that were developed to mitigate the impacts of transportation projects.	Monitoring data will be used to ensure permit compliance. Monitoring results will be incorporated into the design and implementation of new wetland mitigation projects to improve site performance.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOT-03	MFH-4	29
Implement watershed-based strategies for environmental mitigation, flood management and compliance with environmental permits. Provide support for the department's alternative mitigation actions; support the use of the Advance Environmental Mitigation Revolving Account.	Partnerships with local interest groups will be established to integrate the department's mitigation needs into watershed recovery strategies. Strategies and guidance to reduce flood hazards and provide emergency response to floods will be developed to guide the department's protection of salmon. The Advance Environmental Mitigation Revolving Account will be fully capitalized at \$10 Million.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOT-04	MFH-2	30

STATE AGENCY ACTIONS	OUTCOMES	See page 9 for key.					
		Pri-ori-ty	Non-point	Sal-mon	Budget Code	PS Plan Element	Action ID

WASHINGTON STATE DEPARTMENT OF TRANSPORTATION

Support administration of and standardized design for the department's barrier removal projects and grant programs. Participate on the Interagency Review Team for Salmon Restoration. Implement projects to remove barriers to fish passage identified in an existing inventory prepared by the Department of Fish and Wildlife. Accelerate implementation of barrier removal projects.	Salmon recovery will be helped by removing barriers to fish passage associated with state roads. A statewide database will be developed to track barriers to fish passage. Technical assistance on fish passage projects will be provided to local entities and department regions. The department will be involved in the development of critical path methodologies required by Chapter 246, Laws of 1998 (the Salmon Recovery Act).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOT-04	MFH-7	31
Provide technical support for project coordination and recovery planning. Coordinate with the department's regions, ferries, rail, TransAid, Operations and Design, and the Environmental Affairs Office to address project delivery in response to proposed listings under the Endangered Species Act. Develop a pilot mapping and field identification system for roadside areas that contain threatened and endangered salmon, animals and plants; sensitive groundwater recharge areas; public water supplies; and other sensitive areas.	Projects and activities that could affect listed salmon will be identified and evaluated. With stakeholder input, standard measures will be developed to avoid or minimize impacts. Acceptance of ESA compliance strategies will be negotiated with state and federal agencies. Department employees will be trained about ESA issues, responsibilities and procedures. Participation in forums for recovery planning and regulatory changes will take place.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOT-04	MFH-7	32

OFFICE OF COMMUNITY DEVELOPMENT

Provide technical assistance to protect wetlands and aquatic habitat and minimize runoff and flooding for local governments planning under the Growth Management Act.	Information on land-use practices that affect habitat, water quality, drainage and flooding will be provided to local governments to help them complete or amend local plans and regulations. Model ordinances will be developed to assist local governments with their efforts.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	OCD-01	MFH-2	33
Track final local government adoption of critical areas policies and development regulations that reflect the best available science.	An Access database will be developed and reported on the OCD website to reflect final adopted critical areas regulations and policies.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	OCD-01	MFH-9	34
Develop a source list of scientific references to assist cities and counties, including the best available scientific information in developing policies and development regulations to protect the functions and values of critical areas (wetlands, fish and wildlife conservation areas, frequently flooded areas, aquifer recharge areas, and geologically unstable areas). The source list of science will be developed in coordination with state natural resource agencies, including the Action Team.	Source lists of the best available science for critical areas will be developed. The Action Team will be invited to participate in identifying scientific sources of information relevant to nearshore and salmon habitat and shellfish areas	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	OCD-01	MFH-5	35

		See page 9 for key.					
STATE AGENCY ACTIONS	OUTCOMES	Pri-ori-ty	Non-point	Sal-mon	Budget Code	PS Plan Element	Action ID
PUGET SOUND WATER QUALITY ACTION TEAM							
Coordinate and provide technical assistance on habitat restoration and protection to the Northwest Straits Commission, associated Marine Resource Committees (MRCs) and other local planning groups. Advise MRC members on Puget Sound water quality issues, the "Puget Sound Water Quality Management Plan" and work plan, salmon and bottomfish recovery plans, and education and outreach to local communities. Promote the use of soft shoreline stabilization techniques and assist with mapping of important nearshore habitats.	Ecosystem processes that maintain habitat and rebuild marine fish stocks will be protected and restored.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PSAT-04	MFH-8	36
Coordinate the development of a strategy for conducting local habitat inventories.	Local governments will have access to the best available science on which to base resource management decisions.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PSAT-04	MFH-4	37
Coordinate the activities of the nearshore habitat loss work group.	Measures to reduce the loss of nearshore habitat will be improved.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PSAT-04	MFH-2	38
The Action Team support staff will work with Fish and Wildlife, DNR, State Parks, tribal governments and non-governmental organizations to: develop criteria and standards for marine protected areas; coordinate research efforts relevant to marine protected areas; identify gaps in marine protection Soundwide; and designate marine protected areas.	Coordination of efforts to identify and designate marine protected areas will be improved.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	PSAT-04	MFH-8	39

		See page 9 for key.				
LOCAL GOVERNMENT ACTIONS	OUTCOMES	Pri-ori-ty	Non-point	Sal-mon	PS Plan Element	Action ID

SOUNDWIDE

THE PUGET SOUND ACTION TEAM RECOMMENDS THAT:

<p>All local jurisdictions should continue to protect wetlands and other aquatic habitats through comprehensive land-use planning, preservation, restoration, regulation, education, and program evaluation. Local comprehensive plans should be designed to protect wetlands and marine nearshore habitat.</p> <p>Local development regulations should comply with applicable state and federal statutes and rules regulating wetlands and contain the following basic elements consistent with the Department of Ecology's model ordinance:</p> <ul style="list-style-type: none"> * Goal of "no net loss" of wetland acreage and function * Wetland classification scheme * Wetland buffers and setbacks * Requirement for compensatory mitigation, with specified replacement ratios. <p>Local jurisdictions should:</p> <ul style="list-style-type: none"> * Provide incentives for landowners to protect wetlands, stream corridors and marine nearshore habitats. * Update and re-adopt local shoreline master programs consistent with new standards being developed by Ecology in the Shoreline Master Program Guidelines rule. * Maintain and improve wetland inventories and stream classifications to recognize the functions and values of these areas and protect them from incompatible activities. * Incorporate wetland protection programs into Endangered Species Act responses and salmon recovery programs. <p>Conservation districts should continue to help landowners protect and restore wetlands and other aquatic habitats, particularly where those efforts increase or restore access to critical habitats for fish.</p>	<p>There should be a gain in ecological function and area of marine and freshwater habitats in the Puget Sound basin.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	MFH-1	40
---	---	-------------------------------------	--------------------------	-------------------------------------	-------	----

Shellfish Protection

Puget Sound Management Plan Goals

- Protect water quality and prevent contamination of commercial and recreational shellfish beds so shellfish are safe for human consumption.
- Reduce contamination of shellfish beds to achieve a net increase in acreage approved for harvest.
- Prevent human consumption of shellfish from contaminated beds until such time as the contamination is corrected.

Strategies for Achieving the Goals

- Adopt policies to ensure that pollution-control and land-use programs effectively protect water quality in shellfish areas.
- Respond to existing and potential shellfish contamination with aggressive restoration and protection programs.
- Monitor shellfish areas for bacterial contamination, marine biotoxins and other contaminants.
- Increase public involvement and education related to shellfish protection.

Background and Trends

Washington State is the leading producer of farmed shellfish in the United States. The annual wholesale value of commercial clam, oyster and mussel production in Puget Sound is nearly \$50 million. Approximately 250,000 people harvest shellfish recreationally from the Sound's 1,300 public beaches each year.

Shellfish cannot be harvested from about 25 percent of the Sound's classified commercial harvest areas due to bacterial contamination from improperly treated human sewage and animal waste. Fe-

cal bacteria originate from many sources, including inadequately treated sewage from municipal treatment plants and on-site sewage systems, poorly managed wastes from farm animals, stormwater runoff, untreated sewage from boats, and pet and wild animal feces. Municipal and industrial wastewater, combined sewer overflows and stormwater runoff prevent commercial harvest in urban areas, including the Sound's heavily populated eastern shore from Everett to Tacoma.

Since 1987, citizens, businesses, conservation districts, and tribal, state and local governments have worked hard to protect and restore water quality in shellfish beds. This work led to the reopening of more than 10,000 commercial acres in the 1990s, which was unfortunately offset by nearly identical losses in other acreage during the period. In an effort to prevent future downgrades of shellfish harvest areas, the Department of Health now notifies tribal and local governments, the shellfish industry and other interests when water quality is declining and closures may be imminent. The department also partners with local health agencies to classify recreational shellfish areas, educate the public and monitor shellfish areas for biotoxins such as paralytic shellfish poison (PSP).

Tools to reduce bacterial pollution include watershed plans, local programs for managing stormwater and on-site sewage systems, farm management plans, shellfish protection districts, shellfish closure-response plans, and financial and technical assistance programs. The Puget Sound shellfish protection program calls on a number of organizations to carry out this work, including state agencies, local and tribal governments, shellfish growers, citizen committees and non-profit organizations.

Highlights of 2001-2003 Actions

- Health will identify and address water quality declines in shellfish growing areas prior to downgrades in classification.
- Health will continue to monitor water quality, assess pollution sources, identify corrective actions and classify commercial and recreational shellfish growing areas.
- Health, the Department of Ecology and the Action Team support staff will implement the agreement on shellfish closure response planning.
- Health, the University of Washington, Ecology and Action Team support staff will provide technical assistance and education on protection of shellfish beds.

2001-2003 Budget for State Actions

Total Provided Funding	\$1,721,834
------------------------	-------------

JOINT STATE AND FEDERAL ACTIONS	OUTCOMES	See page 9 for key.					
		Pri-ori-ty	Non-point	Sal-mon	Budget Code	PS Plan Element	Action ID
The state departments of Health, Ecology, Natural Resources, and Fish and Wildlife; the Office of Community Development; the State Parks and Recreation Commission; the Conservation Commission; the Northwest Indian Fisheries Commission; Washington Sea Grant; Washington State Cooperative Extension; the Northwest Straits Commission; local marine resource committees; and local and tribal governments, in cooperation with the Action Team support staff will work cooperatively and aggressively to assess shellfish protection needs, to protect and restore water quality in shellfish areas, to enhance shellfish harvest opportunities and to prevent the consumption of contaminated shellfish.							
DEPARTMENT OF FISH AND WILDLIFE							
	Programs for protecting shellfish will be coordinated.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DFW-03	SF-2	41
DEPARTMENT OF ECOLOGY							
	Programs for protecting shellfish will be coordinated.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DOE-05	SF-2	41
DEPARTMENT OF HEALTH							
	Closure-response plans per the Memorandum of Agreement with Ecology and the Action Team will be developed. Agencies will participate in all shellfish water quality restoration and protection projects and in the implementation of watershed action plans where shellfish restoration or protection projects are included.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DOH-02	SF-2	41
PUGET SOUND WATER QUALITY ACTION TEAM							
	Activities will be coordinated and shellfish beds and harvest opportunities will be protected.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	PSAT-04	SF-2	41
WASHINGTON STATE UNIVERSITY, COOPERATIVE EXTENSION							
	Programs for protecting shellfish will be coordinated.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	WSU-01	SF-2	41

JOINT STATE AND FEDERAL ACTIONS		OUTCOMES		See page 9 for key.					
				Pri-ori-ty	Non-point	Sal-mon	Budget Code	PS Plan Element	Action ID
<p>The state departments of Health and Ecology and the Action Team support staff will cooperate and continue to implement the memorandum of agreement on shellfish-closure response planning.</p>									
DEPARTMENT OF ECOLOGY									
	Support for and participation in the development of closure-response plans will occur whenever a shellfish growing area is downgraded in classification.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DOE-05	SF-7	42		
DEPARTMENT OF HEALTH									
	Support for and participation in the development of closure-response plans will occur whenever a shellfish growing area is downgraded in classification.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DOH-02	SF-7	42		
PUGET SOUND WATER QUALITY ACTION TEAM									
	Support for and participation in the development of closure-response plans will occur whenever a shellfish growing area is downgraded in classification.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	PSAT-04	SF-7	42		
<p>The departments of Health and Ecology, and the Puget Sound Water Quality Action Team will assess issues and options for improving the early warning system and for instituting strategies to prevent the contamination of shellfish areas in collaboration with tribal and local governments and other interests.</p>									
DEPARTMENT OF ECOLOGY									
	The early warning system for shellfish closures will be improved and jurisdictions will be able to respond more quickly to pending downgrades or closures.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DOE-05	SF-5	43		
DEPARTMENT OF HEALTH									
	The early warning system for shellfish closures will be improved and jurisdictions will be able to respond more quickly to pending downgrades or closures.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DOH-02	SF-5	43		
PUGET SOUND WATER QUALITY ACTION TEAM									
	The early warning system for shellfish closures will be improved and jurisdictions will be able to respond more quickly to pending downgrades or closures.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	PSAT-03	SF-5	43		

		See page 9 for key.					
STATE AGENCY ACTIONS	OUTCOMES	Pri-ori-ty	Non-point	Sal-mon	Budget Code	PS Plan Element	Action ID
DEPARTMENT OF ECOLOGY							
Protect commercial and recreational shellfish beds from pollution. Provide technical assistance, including the Small Towns Environmental Program (STEP), and financial assistance to correct failing on-site systems. Reduce pollution from land clearing, agricultural and animal-keeping practices. As funding and staffing allow, assist with the early warning system and participate in the development of closure response strategies when shellfish growing areas are threatened or downgraded. Participate on Shellfish Advisory Committee.	The level of contamination of shellfish growing areas, particularly from bacteria, will be reduced. The number of certified growing areas will be increased. Closure response plans will be produced for each downgraded area.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DOE-05	SF-2	45
DEPARTMENT OF HEALTH							
Implement portions of the recreational shellfish plan. Help local health jurisdictions develop and implement recreational shellfish plans under the recreational shellfish beach regulations (Chapter 246-280 WAC). Provide funding to help local health jurisdictions conduct recreational shellfish activities. Continue classification of recreational shellfish beaches in cooperation with local health jurisdictions and focusing on public beaches with high use.	Contracts with interested Puget Sound counties will be established to conduct recreational shellfish activities. The contracts will be monitored through activity reports and on-site visits. Recreational shellfish beaches will be classified in cooperation with local health jurisdictions, focusing on unclassified public beaches with high use. The biotoxin hotline and internet site will be maintained to provide information to the public regarding biotoxin closures. When biotoxin levels exceed the closure criteria, areas will be closed immediately.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DOH-03	SF-4	46
Work with local health jurisdictions, state agencies and others to inform and educate the public about shellfish issues. Coordinate and facilitate meetings of the Shellfish Advisory Committee to share information and consider recommendations on program activities and enhancements.	The public will receive information and education regarding shellfish issues. Methods include brochures, presentations, data sharing and attendance at community events.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DOH-02	SF-6	47
Continue to publish and distribute an annual inventory of commercial and recreational shellfish beds.	An annual inventory will be published and distributed by June 1 of each year.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DOH-02	SF-5	48
Provide technical assistance to protect and restore shellfish growing areas.	Technical assistance will be provided to other agencies and interested parties regarding water quality, pollution and shellfish sanitation.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DOH-02	SF-2	49
Identify and address water quality declines in shellfish growing areas prior to downgrades in classification. Continue to distribute data and information on growing-area sanitation to state agencies, tribal and local governments, shellfish growers and other stakeholders. Information will include Health actions and fecal coliform trends in all areas identified as threatened with downgrades.	Water quality and pollution-source information about commercial growing areas and selected recreational areas will be distributed annually to affected state agencies, tribal and local governments, shellfish growers and other stakeholders. This information will help stakeholders address water quality declines in shellfish growing areas prior to downgrades in classification.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DOH-02	SF-2	50

		See page 9 for key.					
STATE AGENCY ACTIONS	OUTCOMES	Pri-ori-ty	Non-point	Sal-mon	Budget Code	PS Plan Element	Action ID
DEPARTMENT OF HEALTH							
Continue to monitor water quality, assess pollution sources, identify corrective actions and classify commercial and recreational shellfish growing areas.	Commercial and recreational shellfish growing areas will be classified. Water quality in all classified areas will be monitored. Water quality in areas where corrective actions are occurring will be reassessed. Other agencies will be helped to focus their pollution control efforts.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DOH-02	SF-5	51
Plan, conduct and coordinate supplemental water-quality monitoring, pollution-source investigations and hydrographic assessments in threatened and downgraded shellfish areas.	Supplemental water quality and pollution-source information in priority areas for shellfish protection and restoration will be collected. The information will be provided to pollution-control agencies and stakeholders to help direct their activities.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DOH-02	SF-2	52
Identify pollution problems in shellfish growing areas and inform agencies with regulatory authority. Monitor the status of corrective actions.	Pollution problems will be provided to pollution-control agencies. Supplemental water-quality monitoring will be provided to reveal whether pollution-control activities have been effective and whether closed areas can be reopened for commercial or recreational harvest of shellfish.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DOH-02	SF-2	53
Provide technical assistance on shellfish sanitation and contamination source issues.	Other agencies and interested parties will receive assistance with shellfish sanitation issues and contamination source issues.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DOH-02	SF-2	54
Participate on interagency committees to coordinate programs and activities associated with the protection and management of shellfish resources.	Information about shellfish area restoration and protection activities and plans will be exchanged through consultations with tribal, state and local governments and other stakeholders.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DOH-02	SF-2	55
Assist in the development and implementation of watershed action plans where the beneficial use of shellfish resources exists or is restorable in the near future.	Watershed plans will protect or restore shellfish growing areas.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DOH-02	SF-2	56

		See page 9 for key.				
LOCAL GOVERNMENT ACTIONS	OUTCOMES	Pri-ori-tv	Non-point	Sal-mon	PS Plan Element	Action ID

SOUNDWIDE

THE PUGET SOUND ACTION TEAM RECOMMENDS THAT:

<p>Local governments and other affected local jurisdictions should control pollution, manage land uses, and involve and educate people to protect and restore water quality in shellfish areas. Measures should include:</p> <ul style="list-style-type: none"> * Growth management plans and development regulations to prevent and mitigate the effects of development and land use activities on shellfish areas. * Voluntary and regulatory programs to ensure the proper management of on-site sewage systems, stormwater runoff, farm animal wastes and other nonpoint pollution sources. * Meeting with the Department of Health, Department of Ecology, Action Team support staff and other interests to discuss the status of shellfish areas and to initiate actions when areas are identified as threatened because of declining water quality. * Shellfish closure response strategies carried out in partnership with state agencies, tribes, growers and other interests to restore downgraded shellfish areas. * Shellfish protection districts (Chapter 90.72 RCW), stormwater utilities and other tools providing the means to protect and restore water quality in shellfish areas. * Watershed management plans and water cleanup plans to ensure long-term protection and restoration of shellfish harvest opportunities. * Recreational shellfish plans, carried out in partnership with the Department of Health, to monitor and classify recreational shellfish beaches and to involve and educate people on safe shellfish harvesting practices. 	<p>Water quality in shellfish growing areas will improve. The acreage of commercial shellfish beds available for harvest will remain stable or increase. The acreage of classified recreational beaches will increase. The acreage of recreational beaches approved for harvest will increase. Recreational harvesting of shellfish will occur in a safe and legal manner.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	SF-2	58
---	--	-------------------------------------	--------------------------	-------------------------------------	------	----

Stormwater and Combined Sewer Overflows

Puget Sound Management Plan Goal

- To protect and enhance the health of Puget Sound's aquatic species and habitat, natural hydrology and processes, and water quality, and to achieve standards for water and sediment quality by managing stormwater runoff and reducing combined sewer overflows.

Strategies for Achieving the Goals

- Develop and carry out local programs that combine land use and watershed planning and comprehensive stormwater management.
- Maintain minimum technical standards, issue municipal, industrial and construction National Pollutant Discharge Elimination System (NPDES) permits that are consistent with this program; and provide guidance, technical and financial assistance and training.
- Manage runoff on state, federal and tribal government land.
- Achieve the greatest reasonable reduction in combined sewer overflows.
- Conduct cooperative research and disseminate findings.
- Measure progress through performance measures and adjust the program as needed.

Background and Trends

Stormwater runoff, if not adequately managed, poses a serious threat to Puget Sound. Contaminants in stormwater, such as bacteria, nutrients and various chemicals, pollute rivers, streams and Puget Sound. They harm or kill fish and other aquatic organisms and contaminate sediments. High flows during storms erode stream channels and degrade or destroy habitat for salmon and other wildlife. Unmanaged stormwater also causes flooding and damages homes and property. Combined sewers, which carry sewage and stormwater to treatment plants, often overflow during heavy storms, releasing untreated sewage and stormwater into surface waters and Puget Sound.

Although problems related to stormwater are pervasive and much remains to be done, state and local governments and businesses have taken significant steps to reduce damage caused by stormwater.

As of June 2000, about 80 percent of the basin's cities and counties had developed or were developing basic stormwater programs. Some cities and counties in urbanized areas had already developed comprehensive (enhanced) stormwater programs; others were beginning to develop these programs. Many more jurisdictions will now be covered under federally mandated stormwater permits as the Environmental Protection Agency expands coverage to include jurisdictions under 100,000 in population. Municipalities with combined sewer overflows have spent substantial amounts of money reducing overflows.

The Department of Ecology and Action Team support staff provide technical and financial assistance and guidance to help cities and counties develop effective stormwater management programs. Ecology is currently revising its stormwater technical manual of best management practices to improve stormwater practices.

Businesses implement a range of management practices to minimize and treat runoff from their properties. The Washington State Department of Transportation (WSDOT) manages runoff from the state's highways by following practices outlined in the highway runoff manual and NPDES permit. WSDOT also conducts research, offers training, and funds retrofits of stormwater outfalls.

The University of Washington and local governments cooperate to research the effectiveness of various techniques to manage stormwater and the effects of stormwater on aquatic systems.

Highlights of 2001-2003 Actions

- Ecology will issue, manage and reissue stormwater permits and provide technical assistance to local governments.
- WSDOT will mitigate the impacts of stormwater runoff, support stormwater research and train department contractors, agency personnel and local governments to control erosion and manage spills.

- The Action Team support staff will work with Ecology and the Office of Community Development) to provide guidance, technical assistance and support to local governments.
- The Action Team support staff will promote low impact development practices to local governments, the development community and the public.
- Ecology will maintain current guidance and a manual for development of local stormwater programs.
- Ecology will provide grants and loans through the Centennial Program and the State Revolving Fund to help local governments develop stormwater programs.
- Ecology will administer an enhanced municipal stormwater program to address stormwater in smaller communities.

2001-2003 Budget for State Actions

Total Enhancement	\$200,000
Total Provisoed Funding	\$1,703,908
Total Other Funding	\$36,670,000

		See page 9 for key.					
STATE AGENCY ACTIONS	OUTCOMES	Pri-ori-ty	Non-point	Sal-mon	Budget Code	PS Plan Element	Action ID
DEPARTMENT OF ECOLOGY							
Administer an enhanced municipal stormwater program within the Puget Sound basin, as well as statewide, which will include education on EPA's Phase II stormwater rules. Provide technical assistance to cities and counties--both requiring and not requiring stormwater discharge permits--to help them develop programs for managing stormwater, including development manuals, ordinances and education.	Phase I communities will update stormwater programs based on a new permit. Technical assistance will be provided to western Washington communities.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOE-06	SW-2	61
Continue working with the Department of Transportation to provide effective guidance and measures to reduce and control highway runoff and meet NPDES requirements.	Water quality impacts from highway runoff will be reduced.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOE-06	SW-4	62
As resources allow, work with agencies and organizations to maintain current guidance for development of effective and cost efficient stormwater programs.	Current and state-of-the-art guidance will be provided to communities developing or implementing stormwater control programs.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOE-06	SW-2	63
Provide enhanced assistance to local governments. This will include providing grants and loans to local governments through Centennial and the State Revolving Fund, developing data management and modeling tools, and adding additional agency staff to provide technical assistance.	Local governments will have improved tools, expertise and resources with which to develop and implement effective stormwater management programs.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DOE-06	SW-3	65
WASHINGTON STATE DEPARTMENT OF TRANSPORTATION							
Monitor compliance with National Pollutant Discharge Elimination System (NPDES) stormwater requirements and stormwater utility fees.	Best management practices for controlling stormwater will be monitored and other permit requirements will be met, including payment of fees.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	DOT-01	SW-4	66
Mitigate the impacts of stormwater runoff for all new transportation construction projects that add more than 5,000 square feet of impervious surface. Provide roadside maintenance for existing stormwater management facilities. Treat existing impervious surface flows when practicable as specified in the Puget Sound Highway Runoff Manual.	Water quality impacts related to development of new transportation projects will be mitigated. Existing stormwater management practices will be maintained to maximize the efficiency of water quality treatment.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	DOT-01	SW-4	67
Support research related to stormwater treatment, bioengineering, erosion and sediment control, including coagulants for detention ponds, soil additives to prevent erosion, cost-benefit analysis, ultra-urban (confined space) technologies and infiltration methods.	The knowledge base and technology designs for stormwater treatment, erosion control and bioengineering practices will be improved.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOT-01	SW-4	68

STATE AGENCY ACTIONS	OUTCOMES	See page 9 for key.					
		Pri-ori-ty	Non-point	Sal-mon	Budget Code	PS Plan Element	Action ID

WASHINGTON STATE DEPARTMENT OF TRANSPORTATION

Train department contractors, agency personnel and local governments to control erosion and manage spills.	Knowledge among construction-site personnel concerning erosion control and spill management requirements will be improved. Water quality impacts related to erosion control failures will be reduced. On-site personnel will receive training and tools to prevent spills and to initiate appropriate response measures in the event of accidental spills. Contractor certification program for erosion control will be implemented.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	DOT-01	SW-3	69
Work in cooperation with the Department of Ecology, local governments, and other interested parties to assess the need to revise the Highway Stormwater Runoff Rule.	Necessary changes to the Highway Runoff Rule will be identified.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOT-01	SW-4	70

PUGET SOUND WATER QUALITY ACTION TEAM

Convene periodic meetings with Ecology to coordinate regional assistance to local governments on stormwater.	Assistance to local governments will be improved.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PSAT-04	SW-3	71
Work with Ecology and the Office of Community Development to develop guidance for local governments on development of stormwater programs.	Guidance for three elements of the basic program will be developed and distributed to local governments (where currently no guidance exists).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PSAT-04	SW-3	72
Work with Ecology to provide assistance and support to local governments on adoption, enhancement and implementation their stormwater programs.	The number of stormwater programs that are fully or partially completed will be increased.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PSAT-04	SW-3	73
Promote low impact development practices to local governments and the public. Increase understanding and appreciation of the principles and practices so that they are incorporated into new development proposals around the basin, where conditions are appropriate for their use.	Understanding of low impact development principles and increased use of practices will be increased.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PSAT-04	SW-2	74

LOCAL GOVERNMENT ACTIONS	OUTCOMES	See page 9 for key.				
		Pri-ori-tv	Non-point	Sal-mon	PS Plan Element	Action ID

SOUNDWIDE

THE PUGET SOUND ACTION TEAM RECOMMENDS THAT:

<p>Every city and county shall develop and implement a comprehensive stormwater management program. Stormwater programs will vary among jurisdictions, depending on the jurisdiction's population, density, threats posed by stormwater, and results of watershed planning efforts. Cities and counties are encouraged to form intergovernmental cooperative agreements in order to pool resources and carry out program activities most efficiently.</p> <p>Programs shall include the following components (these are described in more detail in the "2000 Puget Sound Water Quality Management Plan"):</p> <ul style="list-style-type: none"> * Incorporate stormwater management into growth management planning. * Stormwater controls for new development and redevelopment, including ordinances requiring the use of best management practices (BMPs) and the adoption and use of Ecology's stormwater manual or an approved alternative. * Review of site plans to ensure that stormwater control measures are adequate and consistent with local requirements * Regular inspection of construction sites by local inspectors with erosion and sediment control practice training * Require maintenance of all permanent public and private stormwater facilities * Develop and implement a program to control sources of pollutants from new development and redevelopment projects and from existing developed lands * Adopt ordinances to prohibit dumping and illicit discharges. Carry out activities to detect, eliminate and prevent illicit discharges, and respond to spills and water quality violations. * Identify and rank existing problems that degrade water quality, aquatic species and habitat, and natural hydrologic processes. * Educate and involve citizens, businesses, elected officials, site designers, developers, builders and other members of the community to build awareness and understanding of stormwater and water quality issues. * Adopt ordinances that allow and encourage low impact development practices. * Participate in watershed or basin planning processes. * Create local funding capacity. * Monitor program implementation and environmental conditions and trends over time. * Develop an implementation schedule with specific target dates and funding sources to help plan program activities. 	<p>All jurisdictions will develop and carry out local programs that combine land use and watershed planning and comprehensive stormwater management.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	SW-1	76
--	--	-------------------------------------	--------------------------	-------------------------------------	------	----

Municipal and Industrial Discharges

Puget Sound Management Plan Goal

- Achieve comprehensive improvement in the control of toxic and other pollutants discharged into Puget Sound by industrial and municipal dischargers, thus reducing and eventually eliminating harm from such contaminants entering or accumulating in the Sound.

Strategies for Achieving Goal

- Adopt and, as needed, revise water and sediment quality standards.
- Require that all waste discharge permits include appropriate monitoring requirements and limitations on toxicants and other pollutants of concern.
- Develop the tools needed to make these permit improvements, including the permit writers' manual, data management, lab support, quality assurance and technical assistance and training.
- Strengthen pretreatment.
- Inspect permitted discharges and take enforcement actions for violations of discharge permits.
- Discover and control unpermitted discharges.

Background and Trends

The Action Team's approach to reducing toxic contaminants emphasizes controlling toxic discharges from municipal and industrial facilities through state-issued permits. The permits require the treatment of wastewater prior to discharge. Untreated or poorly treated wastewater contaminates water and sediments and degrades the health of marine life.

During the past decade, we have seen a decrease in the discharge of toxic chemicals to Puget Sound. Sediment standards have been developed and the state water quality standards have been updated to include toxics. Issued or re-issued permits call for enhanced levels of treatment. Permit writers are better trained. Dischargers receive technical assistance. Pollution prevention programs have been improved.

Over the years, industrial facilities have installed better treatment systems, and municipal plants have provided secondary treatment of sewage. But many effluents still exceed water quality standards at the end of the pipe, where they flow into Puget Sound, and many discharges contaminate sediments and marine life. Research by the National Marine Fisheries Service shows that fish in urban waterways are harmed by exposure to toxic chemicals.

Highlights of 2001-2003 Actions

- The Department of Ecology will implement the wastewater discharge permit program including permitting, compliance assurance, enforcement, technical assistance, inspections, monitoring, pretreatment, stormwater, public involvement, pollution prevention, and developing and maintaining systems and procedures for efficient and consistent implementation.
- Ecology will seek additional permit efficiencies, giving priority to keeping all permits environmentally current while reducing unnecessary paperwork. The permit backlog rate of expired permits will be reduced below 10 percent.

- Ecology will identify waters not meeting water quality standards and set priorities and schedule the development of water cleanup plans for waters not meeting standards. Ecology will complete the plans according to a 15-year schedule.

2001-2003 Budget for State Actions

Total Provided Funding	\$3,762,674
------------------------	-------------

		See page 9 for key.					
STATE AGENCY ACTIONS	OUTCOMES	Pri-ori-ty	Non-point	Sal-mon	Budget Code	PS Plan Element	Action ID

DEPARTMENT OF ECOLOGY

Identify waters not meeting water quality standards. Establish priorities and schedule the development of water cleanup plans--total maximum daily loads (TMDLs)--for waters not meeting standards. Complete TMDLs according to the 15-year schedule. Develop implementation plans for completed TMDLs; track implementation and progress towards meeting the standards.	The 303(d) list of impaired waters will be completed. (Ecology did the current 303(d) list in 1998, and EPA approved it in the year 2000. The next list is due in 2002.) TMDLs and implementation plans will be completed. Water quality and protection of beneficial uses of the state's waters will be improved.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOE-02	P-2	80
Implement an effective wastewater discharge permit program. Core program elements include permitting, compliance assurance, enforcement, technical assistance, inspections, monitoring, pretreatment, stormwater, public involvement, pollution prevention, and developing and maintaining systems and procedures for efficient and consistent implementation.	Environmental criteria will be used to select facilities for inspection. Ecology will inspect a combination of major and minor facilities, in which major facility inspections will be counted at a 2:1 ratio to minor facilities. At a minimum, Ecology will inspect the equivalent of all major facilities each year. NPDES and state waste water discharge permits will be issued on a modified five-year schedule in scheduled watershed and according to environmental priorities. Additional permit efficiencies will be sought, giving priority to keeping all permits environmentally current while reducing unnecessary paperwork. The backlog rate of expired permits will be reduced below 10 percent.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOE-02	P-2	81

On-site Sewage Systems

Puget Sound Management Plan Goal

- Protect the Sound's water quality, shellfish growing areas and other aquatic resources from wastes generated by on-site sewage systems.

Strategies for Achieving the Goal

- Establish comprehensive programs at the local level for the appropriate application of on-site sewage treatment and disposal technologies, and for effective operation, maintenance and inspection, education and financial and technical assistance regarding on-site sewage systems.
- Provide effective state oversight, regulation and financial and technical assistance.
- Investigate, review, approve, promote and apply, as appropriate, alternative technologies for on-site sewage treatment.

Background and Trends

When on-site sewage systems are properly sited, designed, installed, operated and maintained, they effectively treat sewage in areas not served by municipal treatment plants. Improperly functioning systems pollute Puget Sound's waters with bacteria, viruses and nutrients and close productive recreational and commercial shellfish growing areas.

A number of recent initiatives are improving the performance and management of on-site sewage systems. State regulations require that local jurisdictions develop programs to ensure that on-

site systems are properly operated and maintained. The Department of Licensing—in conjunction with the Department of Health, local health jurisdictions and on-site sewage system professionals—is developing a licensing program for designers and a certification program for local health inspectors. Health contracted with local health jurisdictions to research and demonstrate alternative on-site treatment technologies and is developing an information clearinghouse on technical standards of approved systems.

Legislation in 1997 expanded the authority and flexibility of local governments to carry out and fund programs to manage on-site systems.

Field agents associated with the University of Washington and Washington State University provide an array of activities and products to educate citizens about proper operation and maintenance of on-site systems.

Local health jurisdictions are currently developing and carrying out programs to ensure that on-site sewage systems are maintained over time and do not fail. Most programs include public education, financial assistance and professional certification. Local health jurisdictions continue to struggle with difficult issues such as funding, development of databases, and enforcement.

Highlights of 2001-2003 Actions

- Health will provide technical assistance on performance, application, design and operation and maintenance of on-site systems.
- Health will review and revise technical standards and guidance documents for on-site systems and review and approve new technologies through the Technical Review Committee.
- Health will facilitate the On-Site Advisory Committee and use their recommendations to revise the state on-site sewage regulations.
- Health will continue supporting the Northwest On-Site Training Center.
- University of Washington Sea Grant and Washington State University Cooperative Extension will provide technical assistance and education to a variety of audiences on maintaining and monitoring on-site systems.
- Health, University of Washington Sea Grant and the Action Team support staff will provide technical assistance and educational materials related to on-sites.

2001-2003 Budget for State Actions

Total Provided Funding \$1,273,900

		See page 9 for key.					
STATE AGENCY ACTIONS	OUTCOMES	Pri-ori-ty	Non-point	Sal-mon	Budget Code	PS Plan Element	Action ID
DEPARTMENT OF HEALTH							
Provide technical assistance to citizens, state and local agencies, interagency work groups and others regarding the performance, application, design, and operation and maintenance (O&M) of on-site systems. Promote the implementation of effective monitoring and O&M management programs by assisting local health jurisdictions. Develop and distribute additional guidance to health jurisdictions to assist them in establishing areas of special concern and in promoting community awareness of and support for proper operation and maintenance of on-site systems. Develop and maintain a clearinghouse of information on on-site treatment systems, using cost-effective means of distributing the information, including the department's web page.	Citizens, private sector practitioners and local health jurisdiction staff will receive the information needed to make appropriate decisions regarding on-site sewage system technologies that are appropriately matched to sites. Local programs will be enhanced and systems will be better maintained through local operation and maintenance programs, resulting in lower failure rates.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOH-04	OS-2	85
Promote the use of alternative (existing and new/innovative technologies) through the development of a well-trained workforce. Continue to support the Northwest On-site Training Center to help assure that training opportunities exist for all on-site sewage system practitioners. Serve on its management board, help develop and improve curriculum and products for classroom and out-of-classroom training. Extend the classes to new audiences, such as citizens and real estate professionals. Assess local health jurisdictions' needs and capacities for staff training. Develop and deliver, as needed, technology orientation and rules implementation training for local health jurisdictions.	Training opportunities will be enhanced and instructional materials will be revised to include up-to-date technical information and showcase new and innovative technologies. Private and public sector practitioners will have the opportunity to gain the knowledge and develop the skills necessary to appropriately apply the full range of on-site sewage treatment technologies to varied site and development conditions. Local health jurisdiction staff will receive information and have access to training instrumental to the implementation of local on-site sewage programs consistent with the state on-site rules.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOH-04	OS-5	86
Research and evaluate new and innovative on-site sewage treatment and disposal technologies. Present technical topics and issues to the Technical Review Committee (TRC) for recommendations. Develop standards and guidance documents to provide technology-specific information about the performance, application, design, and operation & maintenance (O&M). Regularly review and revise existing technical standards and guidance documents. Assist local environmental health directors develop and apply local on-site sewage program standards.	Technical standards and guidance documents will be developed for new and innovative technologies that are appropriate for the site, soils and climatic conditions in Washington. Existing technical assistance documents will be regularly revised and updated. Access to this up-to-date information will assist citizens and public and private practitioners in their decisions regarding on-site sewage treatment and disposal systems. With information about various technologies and the O&M activities and management needed to assure safe sewage treatment in their rural communities, they will be able to plan for and assure proper operation, maintenance, and monitoring of their systems. State regulations will be implemented consistently among local jurisdictions.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOH-04	OS-5	87

STATE AGENCY ACTIONS	OUTCOMES	See page 9 for key.					
		Pri-ori-ty	Non-point	Sal-mon	Budget Code	PS Plan Element	Action ID

DEPARTMENT OF HEALTH

Continue to facilitate the On-Site Advisory Committee (OSAC) to provide broad program-level direction to assure that program services are meeting priority needs, and that agency resources continue to be well directed to meet the technical assistance needs of local health jurisdictions, private-sector practitioners and citizens. Using the OSAC recommendations, revise the state on-site sewage regulations. Review and approve local on-site sewage regulations, including locally-approved waivers. Participate in local advisory committees.	The department will respond to the OSAC's suggestions for program improvements so that on-site sewage treatment and disposal continues to meet the needs of assuring public health protection in non-sewered areas while offering appropriate and cost-effective options. Standards to protect public health and the environment will be consistent statewide, while allowing local health jurisdictions the flexibility to address specific site and regional conditions.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOH-04	OS-1	88
Review engineering reports and operation and maintenance manuals for proposed large on-site systems (LOSS). Issue permits and maintain a database. Develop agreements with local governments to implement programs for large on-site systems.	Through the LOSS program proposed projects will meet minimum standards so that public health is protected. Through an ongoing operational permit programs, these systems will receive adequate and timely operation and maintenance. Information on systems will be accessible through a database.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOH-04	OS-4	89

PUGET SOUND WATER QUALITY ACTION TEAM

Convene periodic meetings with the Department of Health and others to coordinate assistance to local governments on on-site issues.	Assistance to local governments will be improved.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PSAT-04	OS-1	90
With Health, convene annual workshop on developing effective local operation and maintenance programs.	Local government understanding of operation and maintenance program objectives and practices will be improved.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PSAT-04	OS-2	91
Work with Health to provide assistance to and support of local health departments in developing or enhancing programs for operation and maintenance of on-site systems.	The number of local operation and maintenance programs that are fully or partially completed will be increased.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PSAT-04	OS-2	92
Work with Health and others to develop additional guidance and educational materials related to management of on-site systems, especially guidance on designating areas of special concern.	Local governments will be better able to develop effective operation and maintenance programs.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PSAT-04	OS-2	93

		See page 9 for key.				
LOCAL GOVERNMENT ACTIONS	OUTCOMES	Pri-ori-tv	Non-point	Sal-mon	PS Plan Element	Action ID

SOUNDWIDE

THE PUGET SOUND ACTION TEAM RECOMMENDS THAT:

<p>Local health jurisdictions shall develop operation and maintenance programs so that on-site sewage systems perform as designed and do not threaten aquatic resources and public health.</p> <p>Local on-site sewage programs shall:</p> <ul style="list-style-type: none"> * Provide for regular notification, education, inspection (including periodic system monitoring), maintenance, reporting of inspection results and follow-up by the local health jurisdiction to ensure that failing systems are repaired or replaced. * Provide for identification of areas of special concern and enhanced oversight of systems within those areas. * Establish appropriate mechanisms for funding on-site sewage programs. * Require all on-site sewage systems be designed, installed, permitted and maintained by certified or licensed professionals. 	<p>The number of failures documented by local health jurisdictions will decline. Water quality will improve.</p>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	OS-2	96
---	--	-------------------------------------	--------------------------	-------------------------------------	------	----

Local Watershed Plans

Puget Sound Management Plan Goal

- All watersheds within the Puget Sound basin counties shall implement local watershed plans that result in reduction and prevention of nonpoint pollution to Puget Sound.

Strategies for Achieving Goal

- Provide technical and financial assistance and incentives for local communities and governments both to support development of new watershed plans and to support the implementation of completed watershed plans.

Background and Trends

Watershed protection involves the entire community in reducing sources of nonpoint pollution. Cities and counties—along with their federal, tribal and state partners, residents, businesses and others—develop and implement watershed plans that identify steps to manage the cumulative effects of nonpoint pollution and habitat destruction. Sources of nonpoint pollution include failing on-site sewage systems, runoff from poorly managed agricultural and forest lands, pollutants in urban runoff, and untreated sewage from boats and marinas.

Rapid growth and development in the Puget Sound basin have greatly increased the severity of nonpoint pollution problems. The *Puget Sound Water Quality Management Plan* and a supporting state regulation (Chapter 400-12 WAC) defined a process for watershed planning in Puget Sound. Local watershed plans address nonpoint sources of pollution and habitat restoration and protection. To date, 36 watershed plans have been adopted

and are being implemented. Seven more are in various stages of planning or adoption.

Several new watershed initiatives are active in the Puget Sound basin. The 1998 Salmon Recovery Act and the Watershed Planning Act address water quantity and quality, habitat protection and restoration. The state salmon recovery plan identifies nonpoint pollution as a primary cause of impaired salmon habitat. It recognizes activities already underway as part of the state and Puget Sound nonpoint source control programs.

The Watershed Planning Act provides a framework to identify and correct water quantity, water quality and aquatic habitat problems within large watersheds. It requires that local watershed plans be developed to manage these issues.

The responsibilities of state agencies involved in watershed planning are defined through a memorandum of understanding. Tribal, state and local governments cooperate to implement the Watershed Planning Act and Salmon Recovery Act. State interagency leads coordinate policy, financial, technical and monitoring assistance to local planning efforts. Coordination includes consideration of watershed planning and implementation under Chapter 400-12 WAC.

The state also prepares water cleanup plans that set total maximum daily loads (TMDLs) for pollutants to meet state standards. During the next several years, the Department of Ecology will work with local governments and others to prepare cleanup plans for many water bodies.

Highlights of 2001-2003 Actions

- Ecology will coordinate implementation of *Washington's Water Quality Management Plan to Control Nonpoint Source Pollution* and implement elements assigned to Ecology.
- The Department of Agriculture will assist local planning groups to develop and implement watershed action plans.

2001-2003 Budget for State Actions

Total Provided Funding	\$73,000
------------------------	----------

		See page 9 for key.					
STATE AGENCY ACTIONS	OUTCOMES	Pri-ori-ty	Non-point	Sal-mon	Budget Code	PS Plan Element	Action ID
CONSERVATION COMMISSION							
Continue to provide grants to the 12 conservation districts in Puget Sound to implement the Puget Sound management and work plans in cooperation with the Action Team support staff.	Grants will fund conservation district projects and programs designed to address many priorities of the Puget Sound work plan.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	CC-01	WP-5	100
DEPARTMENT OF AGRICULTURE							
Assist local planning groups to develop and implement watershed action plans.	Assistance on the proper use, storage and transportation of pesticides and fertilizers will be provided as requested. Watershed plans will be reviewed when requested by local governments. Actions required of the Department of Agriculture will be carried out, as funding and authority allow.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOA-01	WP-4	101
DEPARTMENT OF ECOLOGY							
Coordinate the implementation of "Washington's Water Quality Management Plan to Control Nonpoint Source Pollution." Implement specific elements assigned to Ecology in the implementation strategy. Participate on and coordinate the State Agency Nonpoint Pollution Committee. Provide technical and financial assistance to local and tribal governments on effective programs to control nonpoint sources of pollution. Provide compliance and enforcement support as appropriate.	Specific actions in the Nonpoint Plan will be implemented. Nonpoint programs will be coordinated across agencies. Local governments will implement effective nonpoint source control programs. Work with tribes will be coordinated. Local watershed plans will be implemented. Contamination of state waters from nonpoint sources will be reduced.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	DOE-02	WP-0	102
Provide watershed assessments and related information about watersheds, technical assistance and hydrological information, develop a template to streamline the watershed approval process for local watershed plans, and initiate a blue ribbon commission to develop funding recommendations. (Budget enhancement with no Puget Sound proviso; Ecology will report on progress.)	Local planning groups and citizens will increase their capacity of to understand and manage the complexities of their watersheds. This will result in an improved process for approving watershed plans and greater opportunities for funding to both conduct needed planning and to implement plan provisions.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DOE-03	WP-6	103
PUGET SOUND WATER QUALITY ACTION TEAM							
Participate in the State Agency Nonpoint Workgroup and implement actions assigned.	Nonpoint source pollution reduction efforts will be better coordinated and more effective.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	PSAT-04	WP-0	104

		See page 9 for key.				
LOCAL GOVERNMENT ACTIONS	OUTCOMES	Pri-ori-tv	Non-point	Sal-mon	PS Plan Element	Action ID

SOUNDWIDE

THE PUGET SOUND ACTION TEAM RECOMMENDS THAT:

All local jurisdictions should complete ongoing Chapter 400-12 WAC (the Nonpoint Rule) watershed planning and implement priority actions of completed watershed action plans. Local jurisdictions should incorporate their Chapter 400-12 WAC planning into new watershed management efforts that address water and salmon.	Local watershed action plans will be completed and incorporated into new watershed management efforts. Priority actions will be implemented.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	WP-4	105
---	--	-------------------------------------	-------------------------------------	-------------------------------------	------	-----

Aquatic Nuisance Species

Puget Sound Management Plan Goal

- Prevent the unauthorized or accidental introduction of non-native species to Puget Sound; and control the spread of and eradicate aquatic and wetland nuisance species already introduced.

Strategies for Achieving Goal

- Adopt existing state and regional aquatic and wetland nuisance species management plans and programs.
- Focus on Puget Sound and Georgia Basin shared waters aquatic nuisance species management issues.
- Improve current management and monitoring of unauthorized and accidentally introduced non-native species.
- Provide education, public involvement and technical assistance.

Background and Trends

The intentional or accidental introduction of marine plant and animal species that are not native to Puget Sound can wreak havoc on the environment and economy. Not all non-native species are problems. Some, such as Japanese oysters and manila clams, are valuable to region's economy. Non-native species that threaten native marine life and habitat are called aquatic nuisance species.

Most non-native species are undesirable because they could out-compete and displace native species and destroy or seriously alter habitat and wetlands. If commercially important native species were displaced, local and regional economies could suffer.

Several non-native species threaten or are already present in Puget Sound. Zebra mussel, European green crab and the Chinese mitten crab are significant threats. These species were designated as harmful exotic species by state rule. Purple loosestrife, hydrilla and spartina cordgrass have invaded the basin's freshwater and estuary systems. The state's Noxious Weed Control Board classifies these as noxious weeds. Non-native species can enter Puget Sound in many ways, including releases from research institutions, aquaculture operations, the aquarium trade and public and private aquaria, discharge of ballast water from vessels, and the distribution of seafood commodities.

The state Department of Agriculture is responsible for eradicating the spartina infestations in Puget Sound. Between 1997 and 1999, the department reduced the area of spartina infestations by 42 percent in Skagit County and 13 percent in Island County.

To effectively prevent harm from non-native species, a Puget Sound/Georgia Basin International Task Force work group recommended a coordinated approach that involves education, controlling pathways of introductions, response planning, monitoring and research. Washington's management plan for aquatic nuisance species incorporates actions that the task force recommended for Puget Sound.

In 2000, a statewide Aquatic Nuisance Species Coordinating Committee was convened to prevent and minimize the introduction of non-native aquatic species and to control the spread of aquatic nuisance species already established in the state by fostering cooperation among federal, state, tribal and private entities on aquatic nuisance species issues.

The Department of Fish and Wildlife administers a ballast water management program for vessels entering state waters. Ship operators must exchange vessel ballast water at least 50 miles off the Washington coast and report these practices to the department. After 2002, ships that cannot exchange ballast before entering state waters must treat it prior to discharge in state waters. By 2002, the department will develop treatment standards and the private sector will test a ballast water treatment program.

Highlights of 2001-2003 Actions

- Fish and Wildlife will monitor for the presence of green crab.
- Agriculture will coordinate programs to control the spread of spartina and purple loosestrife.
- The Department of Ecology will survey for freshwater noxious aquatic weeds and provide technical assistance and funding to reduce introductions and control existing infestations.

2001-2003 Budget for State Actions

Total Provided Funding	\$256,958
Total Other Funding	\$48,000

		See page 9 for key.					
STATE AGENCY ACTIONS	OUTCOMES	Pri-ori-ty	Non-point	Sal-mon	Budget Code	PS Plan Element	Action ID
DEPARTMENT OF FISH AND WILDLIFE							
Manage infestations of European green crab in Puget Sound through intensive monitoring of the presence of green crab and, as appropriate, provide education and prevent unwanted transfers of this species into the region.	The spread of green crab infestations will be minimized.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DFW-06	ANS-1	110
Coordinate those elements in the state Aquatic Nuisance Species Management Plan that relate to Puget Sound including monitoring programs for green crab, zebra mussel and other nonnative species, and programs for public education and ballast water management.	Improve program coordination in the Puget Sound basin to reduce or eliminate the introduction of nonnative species.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DFW-06	ANS-3	112
DEPARTMENT OF AGRICULTURE							
Employ a full-time, statewide Spartina Control Coordinator. Continue to use integrated pest management methods to control the spread of Spartina and work toward eradicating known infestations. Administer a general water quality permit with Ecology so that landowners can obtain coverage for treating Spartina infestations with pesticides provided they meet certain conditions. Participate in manual and mechanical control efforts.	The spread of Spartina will be minimized and work will occur toward the eradication of known infestations.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOA-01	ANS-3	113
Use several integrated pest management techniques to help landowners control the spread of purple loosestrife. Contract with Washington State University to raise insects for biological control of purple loosestrife. Administer a general water quality permit with Ecology so that landowners can obtain coverage under permit to treat purple loosestrife infestations with herbicides, provided they meet certain conditions. Provide boats to counties so they can access infestations. Participate in manual control efforts.	The spread of purple loosestrife will be minimized and work will occur toward the eradication of known infestations.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOA-01	ANS-3	114

		See page 9 for key.					
STATE AGENCY ACTIONS	OUTCOMES	Pri-ori-ty	Non-point	Sal-mon	Budget Code	PS Plan Element	Action ID
DEPARTMENT OF ECOLOGY							
Survey lake and river public access areas for noxious aquatic weeds. Provide funding and technical assistance to state and local organizations working to reduce the introduction of fresh water noxious aquatic weeds in state waters and to control existing noxious aquatic weed populations. Serve on exotic species committee, as a scientific advisor on aquatic weeds to the State Noxious Weed Control Board, and provide review and input to the Aquatic Plant Management Supplemental Environmental Impact Statement. Initiate research and investigate innovative techniques for managing aquatic weeds; present papers on activities to manage aquatic weeds; and maintain the Aquatic Weeds Web site. Provide technical assistance about aquatic weeds and their management to the public via e-mail, telephone, speaking engagements, web site, disseminate educational materials, and produce a pamphlet about which aquatic plant species to plant in ornamental ponds. Continue work on the hydrilla eradication project.	Noxious weeds discovered when surveying public access areas and information about areas with early infestation will be reported to the appropriate county weed board or district. Information will be provided about early infestation grants so appropriate control measures can be taken. Any newly discovered invasive aquatic species will be reported to the State Noxious Weed Control Board for possible listing as a noxious weed. The Aquatic Plan Management Supplemental EIS will be updated to consider and possibly to include additional chemicals and practices and will result in more tools available for the management of aquatic weeds. The results of research projects documenting environmental impacts of an invasive aquatic species management action will be published in a peer-reviewed journal. Technical and financial assistance and education activities will result in potential eradication and/or control of aquatic weeds from individual sites along with the return of the beneficial uses of the water body and a greater awareness by the public of aquatic weeds and their economic and ecological impacts to Washington State waters.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOE-10	ANS-3	115
The Spills Program will provide technical maritime and federal/international regulatory expertise to: - the Fish and Wildlife's Aquatic Nuisance Species Ballast Water Subcommittee; - the Navy Ballast Water evaluation process; - the Pacific Ballast Water coordination group; and - Canada's West Coast Regional Working Group on Ballast Water Issues. Upon completion of the Fish and Wildlife rules, Ecology vessel inspectors will disseminate educational materials and provide technical assistance.	Entities with the potential to introduce aquatic nuisance species to Washington waters will have current information about Washington State restrictions pertaining to ballast water exchange requirements. The introduction of aquatic nuisance species to Washington waters will be reduced.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOE-09	ANS-3	151
PUGET SOUND WATER QUALITY ACTION TEAM							
The Puget Sound Action Team will continue to represent Puget Sound interests on the national Aquatic Nuisance Species Task Force, Western Regional Panel and the Coastal Committee of the panel to address regional coordination issues, funding and management programs.	Regional and state programs will be coordinated to prevent and control new aquatic nuisance species introductions to Puget Sound and state waters.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PSAT-04	ANS-3	116

		See page 9 for key.					
STATE AGENCY ACTIONS	OUTCOMES	Pri-ori-ty	Non-point	Sal-mon	Budget Code	PS Plan Element	Action ID
PUGET SOUND WATER QUALITY ACTION TEAM							
The Puget Sound Action Team will continue to coordinate aquatic nuisance species management issues with the Northwest Straits Commission and Puget Sound/Gorgia Basin International Task Force.	International and Puget Sound regional activities to control and eliminate aquatic nuisance species will be coordinated and effective.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PSAT-04	ANS-3	117
The state departments of Fish and Wildlife, Ecology, Natural Resources; Puget Sound Action Team; U.S. Coast Guard and the shipping industry will develop and implement a ballast water management program for vessels entering Puget Sound and state waters.	By 2002, standards will be developed and implemented to treat ballast water discharges from vessels to ensure that no aquatic nuisance species are introduced to Puget Sound or state waters. A variety of treatment technologies will be demonstrated.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PSAT-04	ANS-3	118

Education and Public Involvement

Puget Sound Management Plan Goals

To support, improve and sustain regional education and public involvement programs that:

- Inform, educate and involve individuals, groups, businesses, industry and government in the cleanup and protection of Puget Sound.
- Increase understanding of the Sound's ecosystem.
- Create the commitment necessary to sustain efforts to improve and protect water quality and habitat over the long term.

Strategies for Achieving Goals

- Create a public involvement policy for agencies and local governments.
- Help state agencies and tribal governments coordinate education programs on marine and freshwater habitats, water quality policy issues and volunteer action.
- Hire field agents to coordinate among local and regional education and public involvement programs.
- Administer a Public Involvement and Education Fund (PIE Fund) to support short-term public involvement and education efforts in both the private and public sectors.

Background and Trends

Protecting water quality requires an ongoing commitment from the Puget Sound community—individuals, businesses and community groups, as well as government. Education and involvement of the public are vital components of a long-term management strategy for the Sound because they

enable citizens to make informed choices about actions to protect and preserve Puget Sound.

Since 1987, the legislature has funded an effective tool for protecting and improving the region's water quality—the Public Involvement and Education (PIE) Fund. Administered by the Action Team, the PIE Fund has provided more than \$5.2 million for 287 projects, reaching about three million people with the message of clean water. Projects conducted during the 1997-1999 state biennium directly reached more than 9,000 individuals and indirectly reached more than 140,000. The 13-year legacy of this program is a better informed and more involved public and enhanced stewardship of Puget Sound.

During the 1999-2001 biennium, the Action Team funded 16 projects. Each addressed one or more of the priorities identified in the 1999-2001 work plan.

Federal, tribal and state governments support local government environmental education efforts by providing financial and technical assistance on issues related to implementing the work plan. The Action Team coordinates technical assistance to help cities, counties and others implement actions in the work plan.

Field agents from the Washington State University Cooperative Extension and University of Washington Sea Grant programs help carry out the goals of this program by providing education in Jefferson, Kitsap, Mason, Pierce and Thurston counties.

In addition, Action Team support staff coordinates water quality education and involvement activities with those of local governments, the Governor's Council on Environmental Education and the Joint Natural Resource Cabinet.

Highlights of 2001-2003 Actions

- The Office of Community Development will work with others to conduct a short course on local planning for local officials and planners.
- The Department of Health and Action Team support staff will educate the public about water quality issues in the management plan and on findings from the Puget Sound Ambient Monitoring Program.
- The Action Team support staff will distribute information on sources of funding to local governments.
- University of Washington Sea Grant Program will provide information and education on sources of nonpoint pollution and effective approaches to reduce and control it.
- Washington State University Cooperative Extension will provide outreach and education on water quality issues.

2001-2003 Budget for State Actions

Total Enhancement	\$18,000
Total Provided Funding	\$2,989,233

		See page 9 for key.					
JOINT STATE AND FEDERAL ACTIONS	OUTCOMES	Pri- ori- ty	Non- point	Sal- mon	Budget Code	PS Plan Element	Action ID

Coordinate education about Puget Sound and educate the public about water quality issues in the "Puget Sound Management Plan" and work plan, including encouraging media coverage of findings from the Puget Sound Ambient Monitoring Program and reports on Puget Sound's health.

DEPARTMENT OF HEALTH

	An annual inventory will be published and distributed by June 1 of each year.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DOH-02	EPI-2	120
--	---	-------------------------------------	--------------------------	--------------------------	--------	-------	-----

PUGET SOUND WATER QUALITY ACTION TEAM

	Audiences will become better educated about environmental issues. Media will be provided with information on the health and management of Puget Sound.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PSAT-05	EPI-2	120
--	--	-------------------------------------	--------------------------	-------------------------------------	---------	-------	-----

		See page 9 for key.					
STATE AGENCY ACTIONS	OUTCOMES	Pri-ori-ty	Non-point	Sal-mon	Budget Code	PS Plan Element	Action ID
OFFICE OF COMMUNITY DEVELOPMENT							
Work in coordination with other state agencies and the Planning Association of Washington in conducting a "short course on local planning" to city and county planning committees and public officials in the Puget Sound region. The course reflects the planning requirements of the Growth Management Act, the Shoreline Management Act and the Puget Sound management plan.	A planning course notebook of information will be distributed to short course participants that explains the various planning laws and programs in the state. In addition, the short course will feature expertise from consultants and other planning officials experienced with issues such as habitat protection and designing effective development regulations.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	OCD-01	EPI-1	121
PUGET SOUND WATER QUALITY ACTION TEAM							
Collect and distribute information on sources of funding to local governments through the website, newsletters and other means.	Local governments will receive accessible, comprehensive and timely information on funding sources.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PSAT-05	EPI-9	122
Publish the "Sound Waves" newsletter and periodically survey readers.	Information on Puget Sound and opportunities to become involved in protecting it will be provided to more than 15,000 readers. Surveys will show "good" to "excellent" satisfaction with the newsletter.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	PSAT-05	EPI-9	123
Use the Action Team web site as a key extension of the education program, providing easy access to information about water quality and biological resources.	Residents of the Puget Sound basin will be aware of and involved in issues related to protecting the Sound.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	PSAT-05	EPI-9	124
Coordinate technical assistance and other state agency activities in local watersheds and encourage coordination of local efforts to protect water quality and resources. Educate work plan implementers about Puget Sound water quality issues, the "Puget Sound Management Plan" and work plan, and salmon recovery plans.	Work plan implementers will be better informed about the management of Puget Sound and will receive coordinated technical assistance and support. Support staff will complete 250 consultations per year. Educational materials and fact sheets will be distributed.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PSAT-03	EPI-9	125
Provide funding for support of local projects to involve and educate the public in water quality issues (PIE projects). (Requested budget enhancement not received.)	Raise awareness of water quality issues by engaging citizens in actions to protect Puget Sound and through general and diverse education activities.	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	PSAT-05	EPI-8	126

		See page 9 for key.					
STATE AGENCY ACTIONS	OUTCOMES	Pri-ori-ty	Non-point	Sal-mon	Budget Code	PS Plan Element	Action ID

UNIVERSITY OF WASHINGTON, WASHINGTON SEA GRANT PROGRAM

<p>Provide technical assistance, local coordination, education and public involvement for regional water quality and habitat groups, local decision-makers, health districts and communities. The education will reflect a multi-disciplinary knowledge base and focus on issues important to local communities and ecosystems.</p> <p>The educational efforts will assist the implementation of the Aquatic Nuisance Species, On-Site Sewage Systems, Shellfish Protection, Stormwater Management and Wetlands and Fish and Wildlife Habitat Protection programs in the 2001-2003 Puget Sound work plan.</p>	<p>Local communities, decision-makers, health districts and industries will be better able to recognize threats posed by non-indigenous species, failing on-site sewage systems and the loss of fish and wildlife habitat. They will be able to understand the range of nonpoint source pollution affecting their watersheds and how their actions affect this. They will know what actions are necessary to reclaim and keep shellfish beds from being degraded.</p> <p>Local communities and decision-makers will learn about decentralized and alternative systems, which will help them make appropriate decisions about repairing, upgrading or replacing individual on-site sewage systems that are failing.</p>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	UW-01	EPI-2	127
---	--	-------------------------------------	-------------------------------------	--------------------------	-------	-------	-----

WASHINGTON STATE UNIVERSITY, COOPERATIVE EXTENSION

<p>Provide regional water quality specialists and extension educators to work with local governments, schools and community groups educate and involve the public, use volunteers to monitor water quality and encourage citizen participation in water quality issues. Efforts will focus on priority water quality, aquatic habitat and salmon-related issues. These local education efforts will be coordinated with regional, state and national efforts.</p>	<p>Educational efforts will assist the implementation of the Wetlands and Fish and Wildlife Protection, Shellfish Protection, On-Site Sewage Systems, Stormwater Management and other programs in the Puget Sound work plan.</p> <p>Education will have greater impact and use less resources through enhanced coordination, improved delivery and through the support and expertise provided. Area residents will change their behaviors to help protect the health of Puget Sound waters and resources.</p>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	WSU-01	EPI-2	128
---	---	-------------------------------------	-------------------------------------	--------------------------	--------	-------	-----

Puget Sound/Georgia Basin Shared Waters

Puget Sound Management Plan Goal

- To promote and coordinate efforts in Washington and British Columbia in order to ensure the protection, conservation and enhancement of the shared resources of the inland marine waters.

Strategy for Achieving Goal

- The Puget Sound/Georgia Basin International Task Force will coordinate and recommend policies and actions to protect the shared marine waters, to encourage cross-border partnerships and to measure progress through performance measures and adjust the program as needed.

Background and Trends

The governor of Washington and the premier of British Columbia created the Environmental Cooperation Council in 1992 to address a wide range of shared environmental issues between the state and province. In 1993, the council formed the Puget Sound/Georgia Basin International Task Force to address protection of the shared inland marine waters.

Representing Washington and the United States on the task force are the state departments of Ecology, Fish and Wildlife and Natural Resources, the Puget Sound Water Quality Action Team, the U.S. Environmental Protection Agency, the National Marine Fisheries Service, the U.S. Fish and Wildlife Service, the Northwest Indian Fisheries Commission and the Northwest Straits Commission.

The task force works on priority issues in the shared waters, including the loss of nearshore habitat, establishment of marine protected areas, protection of marine plants and animals, and control of the introduction of aquatic nuisance species.

The task force is also working on toxics, nonpoint source pollution and other issues. Much of the work is accomplished through topical work groups.

Other shared waters activities include cooperative agreements between San Juan County and the Gulf Islands Trust, between the Action Team and the Fraser Basin Council, and between Environment Canada and the Environmental Protection Agency.

Highlights of 2001-2003 Actions

- State and federal agencies will continue participating on the Puget Sound/Georgia Basin International Task Force and work groups.

2001-2003 Budget for State Actions

There is no separate state agency budget for work on this program. Actions to implement work group recommendations are included under other programs in this work plan.

		See page 9 for key.					
JOINT STATE AND FEDERAL ACTIONS	OUTCOMES	Pri-ori-ty	Non-point	Sal-mon	Budget Code	PS Plan Element	Action ID
<p>The National Marine Fisheries Service; the Northwest Indian Fisheries Commission; Action Team support staff; the U.S. Fish and Wildlife Service; and the state departments of Ecology, Natural Resources, Transportation, and Fish and Wildlife participate in the Work Group on Minimizing Nearshore Habitat Loss to oversee and coordinate implementation of work group recommendations.</p>							
DEPARTMENT OF FISH AND WILDLIFE							
	Recommendations will be developed and implemented.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DFW-03	PS/GB-1	135
DEPARTMENT OF ECOLOGY							
	Recommendations will be developed and implemented.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOE-10	PS/GB-1	135
PUGET SOUND WATER QUALITY ACTION TEAM							
	Support for and participation in the development of closure-response plans will occur whenever a shellfish growing area is downgraded in classification.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PSAT-04	PS/GB-1	135

JOINT STATE AND FEDERAL ACTIONS	OUTCOMES	See page 9 for key.					
		Pri-ori-ty	Non-point	Sal-mon	Budget Code	PS Plan Element	Action ID
The Environmental Protection Agency; U.S. Fish and Wildlife Service; U.S. Coast Guard; National Marine Fisheries Service; Northwest Indian Fisheries Commission; and state departments of Ecology, Health, Natural Resources, and Fish and Wildlife will continue to participate on the Puget Sound/Georgia Basin International Task Force and/or its work groups to improve coordination with British Columbia and enhance protection of the shared marine waters.							
DEPARTMENT OF FISH AND WILDLIFE							
	Recommendations will be developed and implemented.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DFW-03	PS/GB-1	136
DEPARTMENT OF NATURAL RESOURCES							
	Recommendations will be developed and implemented.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DNR-06	PS/GB-1	136
DEPARTMENT OF ECOLOGY							
	Recommendations will be developed and implemented.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOE-10	PS/GB-1	136
DEPARTMENT OF HEALTH							
	Recommendations will be developed and implemented.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOH-0	PS/GB-1	136
PUGET SOUND WATER QUALITY ACTION TEAM							
	Recommendations will be developed and implemented.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PSAT-04	PS/GB-1	136

		See page 9 for key.					
JOINT STATE AND FEDERAL ACTIONS	OUTCOMES	Pri-ori-ty	Non-point	Sal-mon	Budget Code	PS Plan Element	Action ID
<p>Serve on and support the Puget Sound/Georgia Basin International Task Force and work groups. Oversee implementation of recommendations made by the task force and work groups. Facilitate improved coordination between British Columbia and Washington on marine ecosystem issues.</p>							
DEPARTMENT OF HEALTH							
	The public will receive information and education regarding shellfish issues. Methods will include brochures, presentations, data sharing and attendance at community events.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOH-02	PS/GB-1	137
PUGET SOUND WATER QUALITY ACTION TEAM							
	Protection of Puget Sound and Georgia Basin will be coordinated. Recommendations of the task force will be implemented. Information will be shared on problems, programs, management practices and standards.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PSAT-04	PS/GB-1	137

		See page 9 for key.					
STATE AGENCY ACTIONS	OUTCOMES	Pri- ori- ty	Non- point	Sal- mon	Budget Code	PS Plan Element	Action ID

DEPARTMENT OF ECOLOGY

Coordinate water quality work with British Columbia. Participate on the Puget Sound/Georgia Basin International Task Force. Participate on Task Force workgroups, such as the Toxics Workgroup, and develop technical analyses and implementation strategies, as appropriate. Encourage cross-border communication, coordination and work planning. Participate in planning the Puget Sound Research Conference.	Environmental programs will be coordinated and implemented more effectively for the shared marine resources. Emerging resource issues will be jointly identified and investigated. Communication on issues of significance to both Washington and British Columbia will be enhanced	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOE-10	PS/GB-1	140
--	---	--------------------------	--------------------------	-------------------------------------	--------	---------	-----

Spill Prevention and Response

Puget Sound Management Plan Goal

- To enhance spill preparedness and response activities, while emphasizing spill prevention in Puget Sound and its tributaries, and to ensure that the spill prevention and response actions of state agencies are coordinated among themselves and with federal, local, tribal and private efforts.

Strategies for Achieving Goal

- Review and approve industry spill prevention and contingency plans.
- Update and revise the plans and policies for spill prevention and response.
- Seek improvements in vessel, liquid petroleum pipeline and oil facility safety.
- Provide education and technical assistance on spill prevention.

Background and Trends

Puget Sound is one of the country's primary centers for refining petroleum. In the northern Puget Sound, refineries at Cherry Point and Anacortes import 550,000 barrels of unrefined oil each day. Oil is delivered by vessels through the Strait of Juan de Fuca and via the Trans-Mountain Pipeline from Canada. Roughly 300,000 barrels of refined products are exported daily by tanker vessels to other domestic locations and via the Olympic Pipeline to Oregon.

The huge volume of oil moving through the basin requires a strong program to prevent and respond to spills. Oil products can cause tremendous

environmental damage when spilled or released to the land or water.

During the last decade, Washington has significantly improved its capabilities to prevent and respond to spills and has passed new laws to specifically address these issues. The state trains local emergency response personnel to prevent and respond to spills. There has also been an emphasis on educating boaters, operators of fishing fleets, harbormasters and other marine industry personnel. Washington coordinates its efforts with British Columbia.

In 1999, an underground pipeline broke next to Whatcom Creek in Bellingham. Approximately 277,000 gallons of gasoline were spilled and ran down the creek towards Bellingham Bay. The gasoline caught fire, killing three young people and causing significant damage to the habitat along the creek. As a result, new state legislation was adopted to strengthen programs to protect people, property and the environment from pipeline accidents.

Highlights of 2001-2003 Actions

- The Department of Ecology will participate as co-lead with the U.S. Coast Guard and Environmental Protection Agency to update the Northwest Area Contingency Plan, geographic response plans and related planning documents.
- Ecology will continue to inspect cargo, passenger and fishing vessels, oil tankers (on a voluntary basis) and marine fuel transfer operations.
- Ecology will continue to provide public education and technical outreach to the regulated community and community groups.

- Ecology will continue to maintain around-the-clock spill response capability in regional offices and respond to significant spills of oil and hazardous materials in inland and marine areas.
- Ecology will implement the 24 recommendations of the North Puget Sound Oil Spill Risk Management Panel, in conjunction with the U.S. Coast Guard.
- University of Washington Sea Grant will work on identifying the causes and sources of persistent small oil spills and develop educational strategies to eliminate these spills.
- Ecology will provide cost-share funds for an emergency response tug in Neah Bay for the first year of the biennium. After that time additional funds will be required.

2001-2003 Budget for State Actions

Total Enhancement	\$1,700,000
Total Provided Funding	\$3,940,000

STATE AGENCY ACTIONS		OUTCOMES		See page 9 for key.					
				Pri-ori-ty	Non-point	Sal-mon	Budget Code	PS Plan Element	Action ID
DEPARTMENT OF ECOLOGY									
The Department of Ecology will continue to participate as a co-lead with the U.S. Coast Guard and the Environmental Protection Agency in the annual review and update of the Northwest Area Contingency Plan, geographic response plans and related planning documents.	The response to significant spills of oil and hazardous materials will be rapid, effective and well-coordinated.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOE-09	SP-1	145		
Continue to inspect cargo, passenger and fishing vessels; oil tankers (shifting to a voluntary program); and marine fuel transfer operations (bunkering).	Approximately 450 vessel inspections will be conducted each year, helping to reduce the size and frequency of oil spills. Budget enhancement requested to perform 440 additional inspections per year.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOE-09	SP-1	146		
Continue to review and approve oil spill prevention plans for oil handling facilities and pipelines.	The size and frequency of oil spills from major facilities will be reduced.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOE-09	SP-1	147		
Continue to review and approve oil-spill contingency plans for vessels, facilities and pipelines. Significantly increase emphasis on oil pipeline contingency planning.	Agency and organizational response to significant spills of oil and hazardous materials will be rapid, effective and well coordinated.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOE-09	SP-1	148		
Continue to provide public education and technical outreach to the regulated community and stakeholders through a variety of mechanisms including: an actively maintained web site; an oil-spill advisory committee; publication of a quarterly newsletter, an annual report, VEAT and prevention and safety advisory bulletins; and technical assistance during vessel inspections.	Spill prevention and response activities will be well coordinated with the public and operators of regulated vessels and facilities. Spill frequency will be reduced.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOE-09	SP-4	149		
Continue to maintain around-the-clock spill response capability in regional offices. Respond to significant spills of oil and hazardous materials in inland and marine waters.	Impacts to the environment will be lessened through rapid, effective and well-coordinated responses to oil and other hazardous materials spills.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOE-09	SP-1	150		
Implement the 24 recommendations of the North Puget Sound Oil Spill Risk Management Panel, in conjunction with the U.S. Coast Guard. These recommendations focus on measures that will prevent oil spills from vessels in the marine transportation corridor from the entrance to the Strait of Juan De Fuca though the San Juan Islands. Continue Panel follow-up activities that will improve marine safety. Particular emphasis will be placed on gaps in marine safety on the northern outer coast, the entrance to the Strait of Juan De Fuca and in Haro Strait on the west side of the San Juan Islands. These shared water related activities will involve significant coordination through the States/ BC Oil Spill Task Force and other venues.	The frequency and risk of major and catastrophic oil spills in north Puget Sound will be reduced.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOE-09	SP-1	152		
Provide cost-share to match federal funds to provide rescue tug at Neah Bay for fiscal year 2002. Additional funds will be needed after that.	Frequency of major spills in the northern outer coast and western Strait of Juan de Fuca is reduced.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DOE-09	SP-1	153		

Spills Prevention and Response

		See page 9 for key.					
STATE AGENCY ACTIONS	OUTCOMES	Pri-ori-ty	Non-point	Sal-mon	Budget Code	PS Plan Element	Action ID
UNIVERSITY OF WASHINGTON, WASHINGTON SEA GRANT PROGRAM							
Coordinate with boaters, marina and port operators, and commercial boating associations to identify the causes and sources of persistent small oil spills and develop educational strategies to eliminate these spills.	Small oil spills from port, marina and commercial boat operations will continue to be reduced.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	UW-02	SP-4	154
Provide workshops to help ports, marinas, commercial fishers, ferries and cruise ships prevent small oil spills.	Ports, marinas, commercial fishers, ferries and cruise ship operators will learn about and use best management practices to reduce and eliminate small oil spills.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	UW-02	SP-4	155
Coordinate activities to prevent oil spills with various industry and agency staff and organizations, such as the National Oceanic and Atmospheric Administration, U.S. Coast Guard, Department of Ecology, Waste Information Network, Washington Public Ports Association, Pacific Coast Congress of Harbormasters and Port Managers, Pacific Oil Spill Prevention Education Team and Puget Soundkeeper Alliance.	Workshops, preparation and distribution of materials, and educational events will be better coordinated and will reach a broader, more diverse audience with a consistent message.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	UW-02	SP-4	156
Develop educational materials, fact sheets, oil-spill prevention kits and other items that address prevention of small oil spills by using best management practices	Educational materials will be distributed to boaters and the boating industry, resulting in use of best management practices and ultimately in the reduction or elimination of small oil spills.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	UW-02	SP-4	157

Monitoring, Research & Laboratory Support

Puget Sound Management Plan Goals

- Assess the health of Puget Sound and its resources and communicate information to promote informed choices for the environmental management of Puget Sound.
- Establish and maintain a system of priorities and funding for research and dissemination of research findings.
- Assure the quality and timeliness of physical, chemical and biological laboratory testing.

Strategies for Achieving Goals

- Implement the Puget Sound Ambient Monitoring Program.
- Coordinate citizen monitoring.
- Coordinate and fund research, maintain a list of priorities and help make research results available to decision-makers.
- Review the capability of environmental laboratories to generate quality data and assure adequate laboratory support for sampling programs in agencies and other organizations, and develop and encourage the use of uniform guidelines for quality assurance.
- Develop and update protocols and guidelines to standardize the collection, analysis and transfer of data.

Background and Trends

Resource managers need sound, scientifically based information to make effective decisions about protecting Puget Sound.

The Puget Sound Ambient Monitoring Program (PSAMP) is a long-term effort to monitor and assess the condition of the Puget Sound ecosystem. Through PSAMP, federal, state and local agencies monitor marine and fresh waters, sediments, marine biological resources, nearshore habitat, and the effects of contaminants on fish. Every two years, the Action Team publishes *Puget Sound Update*, which summarizes the findings of the monitoring program and related studies.

Citizen monitoring can contribute valuable information to improve our understanding of Puget Sound. Action Team support staff encourage and support citizen monitoring of shoreline and marine conditions to supplement information developed by federal, state and local governments.

Research improves our understanding of Puget Sound and helps decision-makers evaluate options for protection. Since 1987 the research program has provided a regional focus to disseminate research findings.

The fifth Puget Sound Research Conference was held in February 2001. This conference provided an opportunity for scientists, resource managers and citizens to learn about new scientific findings about the Puget Sound ecosystem.

Since 1987, laboratories conducting analyses in Puget Sound are accredited by the Department of Ecology to ensure they can produce consistent data of a known quality. The agency audits these laboratories to maintain the highest possible standards of analysis and data reporting.

Updated Puget Sound protocols for station positioning were adopted in 2000. These and other Puget Sound protocols ensure the collection of

high quality data that can be used by other scientists.

Highlights of 2001-2003 Actions

- State agencies will continue monitoring and reporting on findings related to PSAMP topics, including the physical environment, pathogens and nutrients, toxic contaminants, human health and biological resources.
- PSAMP agencies will evaluate PSAMP.
- The Action Team support staff will work with agencies to publish and distribute *Puget Sound's Health 2002*.
- The Action Team and partners will host the sixth Puget Sound Research Conference.
- Fish and Wildlife will collect information on depressed fish stocks to assist in the development of management and recovery plans.
- The Department of Ecology will increase its level of activities by developing chemical-specific actions plans to reduce persistent, bioaccumulative toxic (PBT) chemicals, participating in a coordinated water quality monitoring partnership to evaluate the state salmon recovery strategy, and building and enhancing stream flow gauging capability among local agencies.

2001-2003 Budget for State Actions

Total Enhancement	\$639,359
Total Provided Funding	\$7,011,098

JOINT STATE AND FEDERAL ACTIONS		OUTCOMES		See page 9 for key.					
		Pri-ori-ty	Non-point	Sal-mon	Budget Code	PS Plan Element	Action ID		
The state departments of Ecology, Fish and Wildlife, Health, and Natural Resources; Action Team support staff; King County Department of Natural Resources; U.S. Fish and Wildlife Service; and Environmental Protection Agency will coordinate operation and evaluation of the Puget Sound Ambient Monitoring Program (PSAMP).									
DEPARTMENT OF FISH AND WILDLIFE									
	Puget Sound Ambient Monitoring Program (PSAMP) reports and products will be delivered on time. A review of PSAMP will be completed in 2002. Changes to monitoring activities will be made to meet recommendations from program reviews. The department will participate in the management and steering committees.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DFW-0	M-1	160		
DEPARTMENT OF NATURAL RESOURCES									
	PSAMP reports and other products will be delivered on time. Monitoring activities will be adapted as indicated by decisions from the program review. External recommendations will be obtained for program improvements. The department will participate in the management and steering committees.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DNR-01	M-1	160		
DEPARTMENT OF ECOLOGY									
	PSAMP reports and other products will be delivered on time.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOE-01	M-1	160		
DEPARTMENT OF HEALTH									
	Health will participate in the management and steering committees, actively coordinate monitoring activities, and assist in the development of an integrated, comprehensive monitoring strategy.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOH-01	M-1	160		
PUGET SOUND WATER QUALITY ACTION TEAM									
	PSAMP reports and products will be delivered on time. An external review of PSAMP will be completed in 2002. Changes in monitoring activities will be made to meet recommendations from program reviews.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PSAT-02	M-1	160		

		See page 9 for key.					
STATE AGENCY ACTIONS	OUTCOMES	Pri-ori-ty	Non-point	Sal-mon	Budget Code	PS Plan Element	Action ID
DEPARTMENT OF FISH AND WILDLIFE							
Annually monitor the distribution and abundance of marine birds and mammals and contaminants in the tissues of marine mammals.	Spatial and temporal trends of marine bird and mammals and chemical contaminants in harbor seals will be reported and analyzed. Databases, atlases and geographic information system products will be developed for agencies, researchers, local jurisdictions and others. Data will be provided for Action Team performance measures.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DFW-01	M-2	165
Annually monitor chemical contaminants in Puget Sound fish and the effects of contaminants on the health of fish.	Spatial and temporal trends of contaminant levels and associated indicators of fish health in fish species will be assessed. Biennial reports for each species monitored will provide information on the status and trends of contaminant levels in fish tissues. The database will be updated as new data become available, and information will be shared with agencies, researchers and others. Data will be provided for Action Team performance measures.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DFW-02	M-2	166
Collect information on the biology and abundance of depressed marine stocks to assess the health of exploited stocks and help develop management and recovery plans. Sampling will occur in conjunction with ongoing PSAMP groundfish surveys.	Important groundfish species in Puget Sound will be monitored. Population models will be developed. Management and recovery planning will be facilitated, including recommendations for marine protected areas.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DFW-07	M-1	167
DEPARTMENT OF NATURAL RESOURCES							
Measure abundance and biodiversity in biotic communities throughout the Sound through the Spatial Classification and Landscape Extrapolation (SCALE) project. Use intertidal flora and fauna as a measure of ecosystem health. The results are used for regional comparisons, control-impact studies, and long-term trends monitoring.	Critical results for selecting salmonid protection and restoration sites and for monitoring their success will be obtained. This will help the selection of mitigation sites and control/reference sites for mitigation and restoration monitoring. Ultimately this will assist in determining the effects anthropogenic stressors (bulkheading, pier construction, damming rivers, etc.) that change the physical environment have on habitat function. Continue to provide information linking biota to physical factors, to expand the analysis and to multiple years and larger geographic area (currently in South and Central Puget Sound). Data will be provided in the form of maps, GIS coverages and documentation.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DNR-01	M-1	169
Inventory the floating kelp resources of the Strait of Juan de Fuca and outer coast	Data will be provided in the form of maps, GIS coverages and documentation for kelp coverage in 2001 and 2002.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DNR-01	M-1	170

		See page 9 for key.					
STATE AGENCY ACTIONS	OUTCOMES	Pri-ori-ty	Non-point	Sal-mon	Budget Code	PS Plan Element	Action ID
DEPARTMENT OF NATURAL RESOURCES							
Long-term monitoring program to track temporal trends in the extent of eelgrass in Puget Sound. Program will detect trends (changes) in critical habitat and link these changes to stressors which in turn can be managed to preserve or restore habitats. This monitoring specifically concerns subtidal eelgrass and other vegetation types, all on state-owned aquatic lands, and their status and trends are largely unknown.	Regional trends in marine vegetation distribution and abundance will be assessed. Data will be provided in the form of maps, GIS coverages and documentation.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DNR-01	M-1	171
DEPARTMENT OF ECOLOGY							
Monthly sampling will be conducted at established marine water and freshwater monitoring stations. Annual sampling will be conducted at long-term marine sediment quality monitoring stations. Monitoring results will provide baseline characterization of environmental conditions and trends in Puget Sound. Results of monitoring programs will be presented in annual or biennial reports. Data will be provided to support watershed planning, environmental indicators, 305(b), and 303(d) reports and the "Puget Sound Update."	Data will be managed in long-term databases and access to data will be provided via Ecology's web site.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOE-01	M-1	172
Continue to operate laboratory accreditation program, supporting new accreditation applications and accreditation renewals for private, federal, tribal and state laboratories.	Private, federal, tribal and state laboratories will be accredited according to established procedures and rules.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DOE-01	L-1	173
Technical QA guidance documents will be updated. Assistance will be provided to agency staff in the development and application of sound quality management principles. Appropriate quality assurance and quality control procedures and documents will be developed or revised. Quality Assurance Project Plans will be reviewed and comments will be provided upon request.	Current QA and technical assistance will allow agencies and local organization to develop better QA/QC plans and will result in collection of better data.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DOE-01	L-2	174
Conduct special studies designed to answer key questions or characterize and evaluate environmental conditions at specific sites within Puget Sound.	Special studies coordinated through the Puget Sound Ambient Monitoring Program Steering Committee will be conducted. Reports, conference presentations, and data analyzing the results of these selected special studies will be produced. Portions of Puget Sound will be studied, in coordination with the Puget Sound Ambient Monitoring Program Steering Committee, and will be designed to examine specific questions of concern involving key environmental variables (e.g. dissolved oxygen, chlorophyll concentration, salinity, fecal coliform bacteria, benthic community composition, etc.).	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOE-01	M-1	175

		See page 9 for key.					
STATE AGENCY ACTIONS	OUTCOMES	Pri-ori-ty	Non-point	Sal-mon	Budget Code	PS Plan Element	Action ID
DEPARTMENT OF ECOLOGY							
Develop chemical-specific action plans that will lead to the reduction and, where possible, elimination of persistent, bioaccumulative toxic (PBT) chemicals in the Puget Sound environment.	Action plans will be produced for some PBT chemicals. These plans will identify and encourage specific activities for government agencies and business and citizen groups to reduce and eliminate PBTs in the Puget Sound environment. A baseline monitoring program will be developed.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DOE-01	M-0	176
Ecology will participate on the Watershed Health Monitoring and Assessment Committee established under Substitute Senate Bill 5637. This is an interagency committee jointly chaired by the Salmon Recovery Funding Board and the Governor's Salmon Office. It intends to refocus existing agency monitoring activities to implement a comprehensive watershed health monitoring program, with a focus on salmon recovery.	A coordinated system will be established to monitor and assess the ongoing health of watersheds as restoration and protection efforts are implemented as part of the state's salmon recovery efforts. A plan to redesign Ecology's water quality and salmon index monitoring in coordination with other agencies will be developed.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOE-01	M-0	177
Build and enhance stream flow gauging capability among local agencies and provide training, technical assistance and data management services to local entities in selected basins.	Stream flow gauging will be implemented in two additional Puget Sound basins. Stream flow information will be available for use in decisions about the sustainable, long-term management of water resources and salmon recovery.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOE-01	M-1	178
Integrate certification of laboratories that analyze drinking water samples into Ecology's lab accreditation program.	Improved service to laboratories through "one-stop" validation agency for laboratories. Enhanced efficiency for 54 laboratories currently in two laboratory validation programs.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DOE-01	L-1	179
DEPARTMENT OF HEALTH							
Monitor shellfish for paralytic shellfish poisoning to identify trends and potential impacts to public health.	All PSAMP sampling sites will be monitored for levels of biotoxins per the specified frequency. Results will be used to identify potential effects on public health and trends in toxin levels.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DOH-01	M-1	180
Monitor shellfish growing areas for fecal coliform bacteria to identify trends and potential impacts to public health.	All PSAMP growing areas will be monitored for fecal coliform bacteria per the specified frequency to identify trends and potential impacts to public health.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DOH-01	M-1	181
Continue to involve volunteers and citizen monitoring groups in PSAMP activities.	Volunteers will be recruited and trained to collect samples for biotoxin monitoring.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DOH-01	M-3	182
Prepare an annual report that compiles data, interprets results and recommends changes in the design of the monitoring program.	Annual PSAMP reports will be completed and submitted to the Action Team within established guidelines and timeframes.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOH-01	M-1	183

		See page 9 for key.					
STATE AGENCY ACTIONS	OUTCOMES	Pri-ori-ty	Non-point	Sal-mon	Budget Code	PS Plan Element	Action ID
DEPARTMENT OF HEALTH							
Coordinate data management through a computerized system and assure that data meets requirements for quality-assurance. Continue developing the biotoxin portion of the integrated data system using GIS technology.	A new database module for biotoxin will be developed.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOH-01	M-1	184
PUGET SOUND WATER QUALITY ACTION TEAM							
Synthesize and communicate findings of the PSAMP and other scientific studies of Puget Sound.	Scientists, resources managers and citizens of the region will be informed about the condition of Puget Sound through the "2002 Puget Sound Update" (to be published in February 2002); regular features on monitoring the health of Puget Sound in the "Sound Waves" newsletter' "Puget Sound Notes" (to be published at least twice each year); and annual PSAMP science meetings.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PSAT-02	M-1	185
Publish and distribute "Puget Sound's Health 2002."	The general public will be informed about the condition of Puget Sound as measured by the Action Team's environmental indicators.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	PSAT-02	M-1	187
Support citizen monitoring of nearshore and marine resources in the Puget Sound basin.	Citizen monitoring groups will be informed of possible funding opportunities through the development and dissemination of a database on funding sources. Citizen monitoring groups will help develop and share information about citizen monitoring protocols that will enhance the standardization and credibility of citizen monitoring efforts.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PSAT-02	M-2	188

Agricultural Practices

Puget Sound Management Plan Goal

- Reduce and ultimately eliminate harm from pollution stemming from agricultural practices on commercial and noncommercial farms, including animal wastes, pesticides, sediments and nutrients.

Strategy for Achieving Goal

- Implement comprehensive programs through state and local agencies involving education, financial and technical assistance, and, as necessary, regulation and enforcement, to effectively implement farm management plans and management practices and measures.

Background and Trends

The Puget Sound basin's fertile soil lends itself to a wide range of commercial and noncommercial farming. Agriculture is an important part of the basin's economy and culture. The Department of Ecology estimates that agricultural practices impair about 55 percent of the state's river miles that were assessed in 1998. The state uses a different approach to managing pollution from non-dairy operations than for dairies.

Controlling pollution from non-dairy agricultural lands is largely voluntary, with an emphasis on education. The main approach is to help farmers control and prevent pollution by implementing individual farm management plans. These plans are developed with assistance from local conservation districts or local governments. State-level education, financial and technical assistance and, where necessary, regulation and enforcement supports these local efforts.

There are an estimated 145,000 dairy animals in the Puget Sound basin, around half the state's total. The Dairy Nutrient Management Act of 1998 created a new program within the Department of Ecology for managing dairy wastes. This program uses a process of registration, inspection and technical assistance to control farm wastes generated by the state's commercial dairies. All dairy farms are required to develop approved dairy nutrient management plans by July 1, 2002. A Dairy Nutrient Management Task Force chaired by legislators monitors progress and provides oversight of the program.

Riparian setbacks to protect salmon will be required in all plans developed under the Dairy Nutrient Management Act of 1998. Agriculture Fish and Water, a cooperative process between state and federal agencies and the state's major agricultural commodity groups, is reviewing riparian setback standards. The review will determine what agricultural practices, including riparian area management, are necessary to meet requirements of the Endangered Species Act.

Highlights of 2001-2003 Actions

- Ecology will reduce pollution from dairy operations in the Puget Sound basin by implementing the 1998 Dairy Nutrient Management Act. This includes providing technical assistance, registering farms, identifying potential pollution sources, conducting inspections and ensuring compliance.
- Ecology will provide technical assistance, education and other support to conservation districts and farm operators on water quality problems related to poor agricultural practices.
- The Conservation Commission will provide grants to the 12 conservation districts to implement the *Puget Sound Work Plan*.

2001-2003 Budget for State Actions

Total Enhancement	\$840,000
Total Provisoed Funding	\$2,178,511

STATE AGENCY ACTIONS	OUTCOMES	See page 9 for key.					
		Pri-ori-ty	Non-point	Sal-mon	Budget Code	PS Plan Element	Action ID

DEPARTMENT OF AGRICULTURE

Provide technical assistance to local governments and the public on the proper use of pesticides.	All referred complaints regarding pesticide use will be investigated. Annual summaries of complaints and responses to them will be prepared. Pesticide applicators will be licensed and recertified. The department will help Washington State University train pesticide applicators. Training on the safe use and disposal of pesticides will be provided in English and Spanish. The department will restrict use of pesticides to protect endangered species. Waste pesticides will be collected and safely disposed of, as laws and funding allow. Routine enforcement activities will be conducted to enforce the legal use of pesticides.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOA-01	AG-0	190
---	--	-------------------------------------	--------------------------	-------------------------------------	--------	------	-----

DEPARTMENT OF ECOLOGY

Reduce pollution from dairy operations in the Puget Sound basin and statewide by implementing the 1998 Dairy Nutrient Management Act. Continue to register dairy farms and identify potential sources of pollution from dairy cattle. Perform routine and follow-up inspections on dairies. Maintain a database with information on dairy farms, inspections and compliance. Encourage implementation of best management practices. Provide technical assistance, and, where needed, issue wastewater discharge permits and take enforcement actions.	Pollution from dairies will be reduced or eliminated, resulting in improved water quality in Puget Sound and adjacent waters. Bacteria, nutrients and other pollutants will be reduced. Water quality standards will be developed to protect uses such as shellfish and recreation.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DOE-02	AG-2	191
Participate in the Agriculture, Fish and Water discussions with the aim of developing agreements to implement agriculture programs to protect fish and water quality. Provide continued technical assistance, education and other support to conservation districts and farm operators on water quality problems from poor agricultural practices. Participate on the State Conservation Commission.	Protective agricultural practices will be agreed upon and implemented. Compliance with water quality standards and laws will be improved.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DOE-03	AG-0	192

Forestry Practices

Puget Sound Management Plan Goal

- Restore and protect water quality and fish habitat from effects connected with improper forest practices on federal, state and private lands and to restore water bodies and fish habitat already degraded by improper forest practices.

Strategies for Achieving Goal

- Continue using the Timber/Fish/Wildlife Agreement approach on forest management issues.
- Implement new rules for forest practices.
- Develop and implement local programs to address the effects of private forestland conversions and small forestry operations.

Background and Trends

Much of the Puget Sound basin's 16,000 square miles is forested, particularly in the upper watersheds. Federal and state governments, in partnership with industry and non-profit organizations, developed and are implementing programs to restore watersheds. The state regulates non-federal forest practices through the Forest Practices Act.

The Timber/Fish/Wildlife Agreement (TFW) was adopted in 1987. It led to improvements in forest practices. To address the Endangered Species Act and protect salmon and other fisheries, parties involved with forest practices issued the Forests and Fish Report (April 1999). In response to this report and legislative action during the 1999 session, the Forest Practices Board adopted

emergency forest practice rules that became effective on March 20, 2000. The National Marine Fisheries Services has issued a rule under the Endangered Species Act (ESA) indicating that forest practices consistent with the Forest and Fish Report are adequate to protect salmon species listed under ESA. In addition, a number of local governments are developing and implementing local programs to address the effects of forestland conversions and manage small forestry operations.

In western Washington alone, 332,000 acres of non-industrial private forests were converted to non-forest uses between 1979 and 1989. Urban expansion was responsible for 48 percent of these conversions, rights-of-way accounted for about 28 percent, and agricultural uses made up the remaining 24 percent. It could cost as much as \$2.4 billion statewide to build a stormwater system equivalent to the runoff benefits provided by forests converted to other uses in the last decade. (Source: Department of Natural Resources, 1998 *Our Changing Nature: Natural Resource Trends in Washington State*)

Highlights of 2001-2003 Actions

- The Department of Natural Resources, with the Department of Ecology, will review and approve jurisdictional transfer of Class IV general forest practices to eligible cities and counties.

2001-2003 Budget for State Actions

No specific funding is reported on or tracked by agencies for this program.

		See page 9 for key.					
STATE AGENCY ACTIONS	OUTCOMES	Pri-ori-ty	Non-point	Sal-mon	Budget Code	PS Plan Element	Action ID

DEPARTMENT OF NATURAL RESOURCES

Review, in consultation with the Department of Ecology, and approve jurisdictional transfer of Class IV General forest practices to cities and counties that have ordinances or regulations meeting or exceeding state forest practices rules. Provide technical assistance to those cities and counties to which Natural Resources has transferred jurisdiction until January 1, 2002.	All counties and cities will have ordinances or regulations for Class IV General forest practices by December 31, 2001.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DNR-0	FP-2	195
---	---	--------------------------	--------------------------	-------------------------------------	-------	------	-----

Marinas and Boaters

Puget Sound Management Plan Goal

- Reduce and ultimately eliminate harm from wastes generated by recreational boating activities.

Strategies for Achieving Goal

- Coordinate implementation of the program by state agencies and local governments.
- Simultaneously address the needs for waste disposal facilities and processes, education for appropriate constituencies, financial and technical assistance, and regulation and enforcement of boating-related activities that affect water quality
- Evaluate changes in both behavior and water quality that result from the above strategies, and evaluate the need for more extreme protective measures (no-discharge and no-anchorage areas).

Background and Trends

Boating is a popular pastime in Puget Sound. Puget Sounders own more than 165,000 powerboats, 21,500 sailboats, 45,000 canoes and kayaks, and numerous sailboards, inflatable boats and other personal watercraft (Amjoun 1997). Public and private marinas provide moorage for thousands of boats. As a group, boaters can noticeably affect water quality. Untreated sewage pumped overboard contains bacteria and viruses that can close shellfish beds and beaches and make people who eat contaminated shellfish sick. A small amount of oil can contaminate many gallons of water. Paint scrapings and many boat solvents and cleaners are toxic to fish and wildlife.

The State Parks and Recreation Commission provides grants for sewage-disposal pumpouts and other waste-disposal facilities at marinas and other facilities. The Interagency Committee for Outdoor Recreation provides grants to improve boater access. The Commission provides education on boat-waste issues. Much of this activity is enhanced through partnerships with trade associations and environmental groups.

Since 1994, 58 new pumpout stations have been installed in the Puget Sound basin under the Clean Vessel Act Pumpout Grants Program, and 18 more are under contract to be installed. Agencies, trade associations, environmental groups and others participate in the annual National Boating Campaign, a national effort to promote clean boating practices.

Highlights of 2001-2003 Actions

- The State Parks and Recreation Commission will promote and coordinate the installation of waste-disposal facilities at all public and private marinas launch ramps and other boating facilities.
- State Parks—in cooperation with other agencies, environmental groups, local governments and boating organizations—will provide educational materials to boaters on water quality and ways to prevent pollution.

2001-2003 Budget for State Actions

Total Provisoed Funding	\$189,000
Total Other Funding	\$525,000

		See page 9 for key.					
STATE AGENCY ACTIONS	OUTCOMES	Pri-ori-ty	Non-point	Sal-mon	Budget Code	PS Plan Element	Action ID
DEPARTMENT OF ECOLOGY							
Administer the general boatyard National Pollution Discharge Elimination System (NPDES) permit. Provide general information related to the permit, conduct periodic inspections and issue enforcement actions when appropriate.	The general boatyard permit will be effectively managed. Water quality degradation due to boatyard activities such as bottom scraping, pressure hosing and painting, will be reduced.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	DOE-02	MB-0	200
STATE PARKS & RECREATION COMMISSION							
Promote, coordinate and administer the Federal Clean Vessel Act Boater Sewage Pumpout funding program which places boater sewage disposal equipment at public and private marinas, launch ramps and other boater destination or moorage locations.	Up to 26 facilities for the removal of boater sewage from the water will be funded statewide. The amount of sewage collected will increase as additional facilities become available and as more boaters receive educational materials.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PRC-01	MB-5	201
In cooperation with the U.S. Fish and Wildlife Service, Washington Departments of Health, Ecology, Natural Resources, Fish and Wildlife, the Interagency Committee for Outdoor Recreation, the Puget Soundkeeper Alliance, county and city natural resource and health agencies, Washington Water Weeks, Washington Sea Grant, the Puget Sound Action Team and any other interested boaters organizations, will continue to provide educational materials to assist recreational boaters with understanding water quality issues, pollution prevention and ways that they can help improve water quality in Washington.	Guidebooks, brochures, radio spots, posters, Internet information and other materials that will keep boaters advised of environmental issues and offer solutions to improve water quality. A survey done every other biennium will show that more boaters are aware of environmental issues surrounding their boating enjoyment and are increasing use of clean boating practices.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PRC-02	MB-1	202
In cooperation with the Action Team, Department of Fish and Wildlife and other interested groups, develop and produce specialized information for recreational boaters that describes the relationship between boating and existing and potential aquatic nuisance species.	Materials developed and distributed throughout Puget Sound addressing these concerns will focus on how recreational boaters carry nuisance species and what they can do to alleviate this problem. As awareness of the effects of introducing nuisance species increases, boaters will become more involved in preventive actions.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PRC-02	MB-1	203
PUGET SOUND WATER QUALITY ACTION TEAM							
Convene one joint meeting of the State Agency Marina/Boater Task Force and Marina/Boater Advisory Committee to coordinate efforts, resolve issues and promote clean boating practices.	Efforts to reduce waste from marinas and recreational boating in Puget Sound from will be coordinated and focused. State Parks and Recreation Commission, the departments of Health, Natural Resources and Ecology, and the Interagency Committee for Outdoor Recreation will participate in the joint meeting.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PSAT-04	MB-1	204

Contaminated Sediments and Dredging

Puget Sound Management Plan Goal

- Reduce and ultimately eliminate adverse effects on biological resources and humans from sediment contamination throughout the Sound by reducing or eliminating discharges of toxic contaminants and by capping, treating or removing contaminated sediments.

Strategies for Achieving Goal

- Classify sediments that cause adverse biological effects and significant human-health risks.
- Implement Soundwide controls on sources of contamination causing sediments to fail the sediment standards.
- Provide rules and sites for disposal of dredged materials.
- Expand the urban bay program to provide for additional source control and consideration of cleanup actions for existing areas of high sediment contamination levels.

Background and Trends

Many toxic chemicals build up in Puget Sound's sediments. Aquatic animals that live in or on the sediments are exposed to these chemicals, as are the fish, birds and mammals that eat them. This exposure harms aquatic life and poses risks to human health. In addition, difficulties in disposing contaminated sediments cause delays and increased costs for development.

Almost all sediments show the chemical fingerprint of past and current discharges of wastewater and stormwater runoff. Concen-

trations of contaminants are highest in urban bays and other shallow areas where discharges occur. Research shows that juvenile salmon from contaminated bays are affected by the pollution. More than 15,000 acres of Puget Sound sediments have been surveyed for contamination, less than one percent of the total area. About 5,700 acres of the area surveyed was contaminated to levels that exceed sediment standards. The contaminated area has been divided into 86 contaminated sediment sites, 15 of which have been cleaned up since 1996.

Many accomplishments during the last decade helped reduce ongoing toxic contamination. The state developed, and is now updating, standards for sediment quality. Areas with potential contamination were surveyed. The state is working to establish multi-user disposal sites in Puget Sound. Many sites are scheduled for cleanup under the Superfund program.

Highlights of 2001-2003 Actions

- State and federal agencies and tribal and local governments and ports will cooperate on the Bellingham Bay Demonstration Pilot Project to clean up contaminated sediments and restore and enhance aquatic habitats.
- State and federal agencies will coordinate policies for cleaning up sediments as part of the Cooperative Sediment Management Program.
- State and federal agencies and ports will cooperate on development of a multi-user site for treating or disposing of contaminated sediments.

2001-2003 Budget for State Actions

Total Provided Funding	\$1,696,560
Total Other Funding	\$602,000

JOINT STATE AND FEDERAL ACTIONS		OUTCOMES		See page 9 for key.					
		Pri-ori-ty	Non-point	Sal-mon	Budget Code	PS Plan Element	Action ID		
The departments of Ecology, Transportation and Natural Resources; Action Team support staff; the Environmental Protection Agency; the U.S. Army Corps of Engineers; and other federal, tribal, state and local governments will continue to carry out the Bellingham Bay Demonstration Pilot Project to clean up contaminated sediments and restore and enhance aquatic habitats.									
DEPARTMENT OF FISH AND WILDLIFE									
	Cleanup and treatment/disposal, as appropriate, of contaminated sediments within Bellingham Bay will commence. Cleanup may be completed in the 2004 to 2006 time period.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DFW-00	S-6	210		
DEPARTMENT OF NATURAL RESOURCES									
	Cleanup and treatment/disposal, as appropriate, of contaminated sediments within Bellingham Bay will commence. Cleanup may be completed in the 2004 to 2006 time period.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DNR-04	S-6	210		
DEPARTMENT OF ECOLOGY									
	Cleanup and treatment/disposal, as appropriate, of contaminated sediments within Bellingham Bay will commence. Cleanup may be completed in the 2004 to 2006 time period.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOE-07	S-6	210		
WASHINGTON STATE DEPARTMENT OF TRANSPORTATION									
	Cleanup and treatment/disposal, as appropriate, of contaminated sediments within Bellingham Bay will commence. Cleanup may be completed in the 2004 to 2006 time period.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOT-02	S-6	210		
PUGET SOUND WATER QUALITY ACTION TEAM									
	Cleanup and treatment/disposal, as appropriate, of contaminated sediments within Bellingham Bay will commence. Cleanup may be completed in the 2004 to 2006 time period.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PSAT-04	S-6	210		

JOINT STATE AND FEDERAL ACTIONS	OUTCOMES	See page 9 for key.					
		Pri-ori-ty	Non-point	Sal-mon	Budget Code	PS Plan Element	Action ID
The state departments of Ecology, Transportation and Natural Resources; Action Team support staff; the Environmental Protection Agency; and the U.S. Army Corps of Engineers will continue to coordinate policies for cleaning up sediments as part of the Cooperative Sediment Management Program.							
DEPARTMENT OF FISH AND WILDLIFE							
	Agencies will be informed of each other's activities and will develop uniform and complementary policies.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DFW-00	S-6	211
DEPARTMENT OF NATURAL RESOURCES							
	Agencies will be informed of each other's activities and will develop uniform and complementary policies.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DNR-04	S-6	211
DEPARTMENT OF ECOLOGY							
	Agencies will be informed of each other's activities and will develop uniform and complementary policies.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOE-07	S-6	211
WASHINGTON STATE DEPARTMENT OF TRANSPORTATION							
	Agencies will be informed of each other's activities and will develop uniform and complementary policies.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOT-02	S-6	211
PUGET SOUND WATER QUALITY ACTION TEAM							
	Agencies will be informed of each other's activities and will develop uniform and complementary policies.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PSAT-04	S-6	211

JOINT STATE AND FEDERAL ACTIONS	OUTCOMES	See page 9 for key.					
		Pri-ori-ty	Non-point	Sal-mon	Budget Code	PS Plan Element	Action ID

The U.S. Army Corps of Engineers; the U.S. Environmental Protection Agency; and the state departments of Ecology and Natural Resources will continue to manage open-water disposal of dredged material, including making permit decisions, and managing and monitoring disposal sites through the Dredged Material Management Program.

DEPARTMENT OF NATURAL RESOURCES

	Open-water disposal sites that meet adopted environmental goals will continue to be available. One program annual review meeting will be completed each year. Dredging and disposal proposals will be reviewed as needed.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DNR-03	S-2	212
--	---	-------------------------------------	--------------------------	-------------------------------------	--------	-----	-----

DEPARTMENT OF ECOLOGY

	Open-water disposal sites that meet adopted environmental goals will continue to be available. One program annual review meeting will be completed each year. Dredging and disposal proposals will be reviewed as needed.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOE-07	S-2	212
--	---	-------------------------------------	--------------------------	-------------------------------------	--------	-----	-----

In cooperation with the U.S. Army Corps of Engineers, the Environmental Protection Agency, the state departments of Ecology and Natural Resources, the Washington Public Ports Association, the U.S. Fish and Wildlife Service and the Action Team support staff, Ecology will continue the study effort and solicit private proposals for siting, construction and operation of a multi-user disposal or treatment facility in Puget Sound.

DEPARTMENT OF NATURAL RESOURCES

	Recommendations for a multi-user site will be completed.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DNR-04	S-4	213
--	--	-------------------------------------	--------------------------	-------------------------------------	--------	-----	-----

DEPARTMENT OF ECOLOGY

	Recommendations for a multi-user site will be completed.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOE-07	S-4	213
--	--	-------------------------------------	--------------------------	-------------------------------------	--------	-----	-----

PUGET SOUND WATER QUALITY ACTION TEAM

	A Puget Sound multi-user disposal or treatment site will be successfully sited and planning will start for construction and operation of the facility.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	PSAT-04	S-4	213
--	--	-------------------------------------	--------------------------	-------------------------------------	---------	-----	-----

		See page 9 for key.					
STATE AGENCY ACTIONS	OUTCOMES	Pri-ori-ty	Non-point	Sal-mon	Budget Code	PS Plan Element	Action ID
DEPARTMENT OF ECOLOGY							
In cooperation with the other Multi-User Disposal Site (MUDS) partners, Ecology will solicit private proposals for siting, construction and operation of a multi-user facility in Puget Sound.	A Puget Sound Multi-User Disposal Site will be successfully sited, and planning will begin for construction and operation of the facility.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOE-07	S-4	215
Participate with the Bellingham Bay Pilot partners in implementing planned Bellingham Bay cleanup and restoration plan actions.	Cleanup, treatment and disposal will commence, as appropriate, of contaminated sediments within Bellingham Bay. Cleanup may be completed in the 2004 to 2006 time period.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOE-07	S-6	216
Update and publish a list of contaminated sediment sites annually.	Lists of contaminated sediment sites will be available for use by organizations and the public.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOE-07	S-6	217
Continue to clean up priority contaminated sediment sites.	Annually, the list of contaminated sediment sites will be ranked for cleanup activities. A list identifying the status of clean-up activities for contaminated sediment sites will be updated. Contaminated sediment sites will be cleaned up.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOE-07	S-6	218
Develop technical and policy guidance for coordination of the Sediment Management Standards (Chapter 173-204 WAC) with listing and delisting and completion of sediment Total Maximum Daily Loads (TMDL).	A sediment TMDL guidance document and a proposed sediment TMDL list will be developed for the year 2001.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOE-07	S-6	219
Continue to coordinate with the U.S. Army Corps of Engineers, Department of Natural Resources and the Environmental Protection Agency, Region 10, on implementing the Dredged Material Management Program managing open-water disposal of dredged material in Washington State.	A program annual review meeting will be conducted each year. Dredging and disposal proposals will be reviewed as needed.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOE-07	S-2	220
WASHINGTON STATE DEPARTMENT OF TRANSPORTATION							
Develop and implement programs to reduce and control the impacts of toxic compounds on sensitive habitats associated with transportation projects.	Strategies will continue to be developed and implemented to control sources, clean up contamination, and repair damages to natural resources resulting from the release of toxic compounds into the environment. Statewide strategies will be integrated with highway and ferry transportation projects. Funding mechanisms will be developed for the cleanup of contaminated sediments, particularly those surrounding ferry terminals. Statewide strategies will be developed to integrate the cleanup of toxics with watershed planning. Federal "brownfields" policies on toxics will be incorporated into state transportation plans.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOT-02	S-1	221

		See page 9 for key.					
STATE AGENCY ACTIONS	OUTCOMES	Pri-ori-ty	Non-point	Sal-mon	Budget Code	PS Plan Element	Action ID

WASHINGTON STATE DEPARTMENT OF TRANSPORTATION

Continue to support restoration activities in Eagle Harbor, including monitoring of eelgrass plantings and estuary restoration related to the Eagle Harbor Superfund Site. Develop contingency plans for spills at Washington State Ferry sites and during highway projects. Sample sediment at ferry terminals.	Permit compliance and successful restoration will be carried out at the Eagle Harbor Superfund site. Spill management plans will be developed to improve prevention and response to accidental spills. Sediment sampling will be completed at selected ferry terminals.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	DOT-02	S-0	222
--	---	-------------------------------------	--------------------------	-------------------------------------	--------	-----	-----

Budget for the 2001-2003 Puget Sound Water Quality Work Plan

Table 2

Final Budget by Agency

Table 2 on the following pages presents the budget proposed by state agencies for implementing the *2001-2003 Puget Sound Water Quality Work Plan*.

Key to Table 2

Budget Code: Funding under each budget code supports one or more related actions in the work plan. Each action in the work plan that is supported with state funding is referenced to a budget code.

Title: Short description of the budget category.

Continued 1999-2001 Provisoed Funds: Funds that were provisoed by the legislature solely to implement the Puget Sound work plan during the 1999-2001 biennium.

Action Team Recommendations for 2001-2003: Changes to the 1999-2001 biennium funding levels proposed by state agencies and submitted by the Action Team. This includes the proposed proviso adjustments and the total proposed provisoed funding amounts for each budget code.

Final Legislative Budget Appropriations for 2001-2003: Changes to the 1999-2001 biennium funding levels that have been proposed by state agencies. This includes the proposed provisoed adjustments and the total provisoed funding amounts for each budget code.

Non-Proviso Funds Being Reported by Agencies: Money that agencies are voluntarily reporting on to the Action Team so that Puget Sound benefits can be tracked.

Fund: The source of the funds

Fund Source Acronyms:

GF-S	General Fund-State
GF-F	General Fund-Federal
GF-F Capital	General Fund-Federal
ALEA	Aquatic Lands Enhancement Account
WQPF	Water Quality Permit Fees
MVF	Motor Vehicle Fund
STCA	State Toxic Control Account
OSAA	Oil Spill Administration Account
WQA	Water Quality Account
FAWA	Freshwater Aquatic Weed Account
WQA-Capital	Water Quality Account-Capital
SDPA	State Drought Preparedness Account

Table 2. Final Budget, by Agency for the 2001-2003 Puget Sound Water Quality Work Plan

Budget Code	Title	Continued 1999-2001 Providoed Funds	Action Team Recommendations for 2001-2003		Final Legislative Budget Appropriations for 2001-2003		Non-Proviso Funds Being Reported by Agencies	Fund Source
			Providoed Adjustments	Providoed Total	Providoed Adjusments	Providoed Total		
DEPARTMENT OF AGRICULTURE								
DOA-01	Watershed Technical Assistance	\$73,000		\$73,000		\$73,000		GF-S
Total	Department of Agriculture	\$73,000		\$73,000		\$73,000		GF-S
OFFICE OF COMMUNITY DEVELOPMENT								
OCD-01	Technical Assistance	\$123,000		\$123,000		\$123,000		GF-S
OCD-02	Critical areas ordinance update grants		\$2,400,000	\$2,400,000				GF-S
Total	Office of Community Development	\$123,000	\$2,400,000	\$2,523,000		\$123,000		
CONSERVATION COMMISSION								
CC-01	Technical assistance and funding for Puget Sound Conservation Districts for their water quality projects	\$364,000		\$364,000	\$130,000	\$494,000		GF-S
		\$130,000		\$130,000	(\$130,000)			WQA
			\$840,000	\$840,000	\$840,000	\$840,000		WQA Capital
Total	Conservation Commission	\$494,000	\$840,000	\$1,334,000	\$840,000	\$1,334,000		
DEPARTMENT OF ECOLOGY								
DOE-01	Ambient monitoring and laboratory certification	\$3,018,769	\$3,979,359	\$6,998,128	\$257,747	\$3,276,516		GF-S
					\$217,830	\$217,830		WQA
					\$223,782	\$223,782		SDPA
		\$244,000		\$244,000		\$244,000		GF-F
DOE-02	Waste water discharge permits	\$76,674		\$76,674		\$76,674		GF-S
		\$3,686,000		\$3,686,000		\$3,686,000		WQPF
DOE-03	Watershed assistance	\$844,511	\$2,168,548	\$3,013,059		\$844,511		GF-S
								SRA
DOE-05	Shellfish protection	\$109,534		\$109,534		\$109,534		GF-S
DOE-06	Stormwater program	\$1,503,908	\$480,000	\$1,983,908		\$1,503,908		GF-S
					\$200,000	\$200,000		STCA
		\$1,000,000	\$1,000,000				SBCA	
								SRA
DOE-07	Contaminated sediments and dredging	\$715,260		\$715,260		\$715,260		GF-S
		\$819,000		\$819,000		\$819,000		STCA
		\$9,000		\$9,000		\$9,000		GF-F
DOE-08	Wetland protection and restoration	\$601,344	\$3,246,355	\$3,847,699		\$601,344		GF-S
								WQA
		\$141,000		\$141,000		\$141,000		GF-F
DOE-09	Oil spills prevention and response	\$2,070,000		\$2,070,000		\$2,070,000		OSPA
			\$3,330,100	\$3,330,100	\$1,700,000	\$1,700,000		GF-S
DOE-10	Aquatic Nuisance Species						\$48,000	FAWA

Table 2. Final Budget, by Agency for the 2001-2003 Puget Sound Water Quality Work Plan

Budget Code	Title	Continued 1999-2001 Provisoed Funds	Action Team Recommendations for 2001-2003		Final Legislative Budget Appropriations for 2001-2003		Non-Proviso Funds Being Reported by Agencies	Fund Source
			Provisoed Adjustments	Provisoed Total	Provisoed Adjustments	Provisoed Total		
Subtotal	Department of Ecology	\$6,870,000	\$13,204,362	\$20,074,362	\$1,957,747	\$8,827,747		GF-S
Subtotal	Department of Ecology	\$394,000		\$394,000		\$394,000		GF-F
Subtotal	Department of Ecology	\$2,070,000		\$2,070,000		\$2,070,000		OSPA
Subtotal	Department of Ecology						\$48,000	FAWA
Subtotal	Department of Ecology	\$819,000		\$819,000	\$200,000	\$1,019,000		STCA
Subtotal	Department of Ecology				\$223,782	\$223,782		SDPA
Subtotal	Department of Ecology				\$217,830	\$217,830		WQA
Subtotal	Department of Ecology		\$1,000,000	\$1,000,000				SBCA
Subtotal	Department of Ecology	\$3,686,000		\$3,686,000		\$3,686,000		WQPF
Total	Department of Ecology	\$13,839,000	\$14,204,362	\$28,043,362	\$2,599,359	\$16,438,359	\$48,000	
DEPARTMENT OF FISH AND WILDLIFE								
DFW-01	Marine bird and mammal monitoring	\$435,755	\$285,600	\$721,355		\$435,755		GF-S
DFW-02	Fish contaminant monitoring	\$926,850		\$926,850		\$926,850		GF-S
DFW-03	Soundwide technical assistance for water quality and habitat	\$289,320		\$289,320		\$289,320		GF-S
DFW-04	Soundwide technical assistance for wetlands	\$254,560	(\$235,600)	\$18,960	(\$235,600)	\$18,960		GF-S
DFW-05	Local Area technical assistance for water quality and habitat	\$635,880		\$635,880		\$635,880		GF-S
DFW-06	Aquatic nuisance fauna control and ballast water legislation implementation	\$256,958	\$37,500	\$294,458		\$256,958		GF-S
DFW-07	Management & recovery plans for ground & forage fish, establish marine protected areas	\$800,000		\$800,000		\$800,000		GF-S
DFW-08	Determination of impediments to Puget Sound herring recovery		\$554,100	\$554,100				GF-S
DFW-09	Stormwater and CSO Technical Assistance		\$325,600	\$325,600				GF-S
DFW-10	Puget Sound Marine and Stream Corridor Habitat Protection and Restoration Guidelines		\$787,800	\$787,800				GF-S
Total	Department of Fish and Wildlife	\$3,599,323	\$1,755,000	\$5,354,323	(\$235,600)	\$3,363,723		GF-S
DEPARTMENT OF HEALTH								
DOH-01	Monitoring, data management and reporting	\$524,800	(\$60,000)	\$464,800	(\$60,000)	\$464,800		GF-S
DOH-02	Protection and restoration of shellfish beds	\$936,300		\$936,300		\$936,300		GF-S
DOH-03	Recreational shellfish program	\$676,000		\$676,000		\$676,000		GF-S
DOH-04	On-site sewage management	\$1,273,900		\$1,273,900		\$1,273,900		GF-S
Total	Department of Health	\$3,411,000	(\$60,000)	\$3,351,000	(\$60,000)	\$3,351,000		GF-S
DEPARTMENT OF NATURAL RESOURCES								
DNR-01	Nearshore habitat monitoring	\$844,250		\$844,250		\$844,250		ALEA
DNR-02	Management of wetlands	\$36,000		\$36,000		\$36,000		GF-S
DNR-03	Puget Sound Dredged Disposal Analysis (No work plan funding proposed.)							
DNR-04	Multi-user disposal site program	\$153,300		\$153,300		\$153,300		ALEA
Subtotal	Department of Natural Resources	\$997,550		\$997,550		\$997,550		ALEA
Subtotal		\$36,000		\$36,000		\$36,000		GF-S
Total	Department of Natural Resources	\$1,033,550		\$1,033,550		\$1,033,550		

Table 2. Final Budget, by Agency for the 2001-2003 Puget Sound Water Quality Work Plan

Budget Code	Title	Continued 1999-2001 Provisoed Funds	Action Team Recommendations for 2001-2003		Final Legislative Budget Appropriations for 2001-2003		Non-Proviso Funds Being Reported by Agencies	Fund Source
			Provisoed Adjustments	Provisoed Total	Provisoed Adjusments	Provisoed Total		
STATE PARKS AND RECREATION COMMISSION								
P&RC-01	Marina and Boater Grants Program					\$450,000		GF-F Capital
P&RC-02	Environmental education for boaters	\$189,000		\$189,000		\$189,000		ALEA
						\$75,000		GF-F
Subtotal	State Parks and Recreation Commission	\$189,000		\$189,000		\$189,000		ALEA
Subtotal	State Parks and Recreation Commission					\$75,000		GF-F
Subtotal	State Parks and Recreation Commission					\$450,000		GF-F Capital
Total	State Parks and Recreation Commission	\$189,000		\$189,000		\$189,000	\$525,000	
DEPARTMENT OF TRANSPORTATION								
DOT-01	Stormwater						\$36,670,000	MVF
DOT-02	Contaminated Sediments						\$602,000	MVF
DOT-03	Wetlands						\$6,000,000	MVF
DOT-04	Habitat						\$12,000,000	MVF
DOT-05	Education and Public Involvement							MVF
Total	Department of Transportation						\$55,272,000	
UNIVERSITY OF WASHINGTON								
UW-01	Water quality agents	\$300,000		\$300,000		\$300,000		GF-S
UW-02	Oil spill prevention education (Ecology pass through)	\$170,000		\$170,000		\$170,000		OSPA
UW-03	Water quality agents (North Sound)		\$300,000	\$300,000				GF-S
Total	University of Washington	\$470,000	\$300,000	\$770,000		\$470,000		
WASHINGTON STATE UNIVERSITY								
WSU-01	Water quality agents	\$331,000		\$331,000		\$331,000		GF-S
	Add two additional field agents		\$300,000	\$300,000				GF-S
Total	Washington State University	\$331,000	\$300,000	\$631,000		\$331,000		GF-S
PUGET SOUND WATER QUALITY ACTION TEAM								
PSAT-01	Work plan and management plan	\$636,841		\$636,841	(\$636,841)	(\$0)		GF-S
		\$40,341		\$40,341		\$40,341		GF-F
					\$636,841	\$636,841		WQA
PSAT-02	Puget Sound ambient monitoring and research	\$355,200	\$700,000	\$1,055,200	(\$355,200)	\$0		GF-S
		\$22,115		\$22,115		\$22,115		GF-F
					\$355,200	\$355,200		WQA
PSAT-03	Regional technical assistance	\$997,788		\$997,788	(\$997,788)	(\$0)		GF-S
		\$69,019		\$69,019	\$10,000	\$79,019		GF-F
					\$997,788	\$997,788		WQA
PSAT-04	Technical programs	\$673,198		\$673,198	(\$673,198)	\$0		GF-S
		\$41,072		\$41,072		\$41,072		GF-F
					\$673,198	\$673,198		WQA
PSAT-05	Public information, education and involvement actions	\$536,973		\$536,973	(\$536,973)	\$0		GF-S
		\$36,453		\$36,453		\$36,453		GF-F
		Public Involvement and Education (PIE) Fund	\$700,000	\$300,000	\$1,000,000		\$544,973	\$544,973
						\$700,000		WQA

Table 2. Final Budget, by Agency for the 2001-2003 Puget Sound Water Quality Work Plan

Budget Code	Title	Continued 1999-2001 Provisoed Funds	Action Team Recommendations for 2001-2003		Final Legislative Budget Appropriations for 2001-2003		Non-Proviso Funds Being Reported by Agencies	Fund Source
			Provisoed Adjustments	Provisoed Total	Provisoed Adjustments	Provisoed Total		
Subtotal	Puget Sound Water Quality Action Team	\$209,000		\$209,000	\$10,000	\$219,000		GF-F
Subtotal	Puget Sound Water Quality Action Team	\$3,200,000	\$700,000	\$3,900,000	(\$3,200,000)	\$0		GF-S
Subtotal	Puget Sound Water Quality Action Team	\$700,000	\$300,000	\$1,000,000	\$3,208,000	\$3,908,000		WQA
Total	Puget Sound Water Quality Action Team	\$4,109,000	\$1,000,000	\$5,109,000	\$18,000	\$4,127,000		
Total by Funding Source								
Subtotal	All Agencies GF-S	\$18,307,323	\$18,599,362	\$36,906,685	(\$1,407,853)	\$16,899,470		GF-S
Subtotal	All Agencies GF-F	\$603,000		\$603,000	\$10,000	\$613,000	\$75,000	GF-F
Subtotal	All Agencies GF-F Capital						\$450,000	GF-F Capital
Subtotal	All Agencies ALEA	\$1,186,550		\$1,186,550		\$1,186,550		ALEA
Subtotal	All Agencies WQPF	\$3,686,000		\$3,686,000		\$3,686,000		WQPF
Subtotal	All Agencies MVF						\$55,272,000	MVF
Subtotal	All Agencies STCA	\$819,000		\$819,000	\$200,000	\$1,019,000		STCA
Subtotal	All Agencies OSPA	\$2,240,000		\$2,240,000		\$2,240,000		OSPA
Subtotal	All Agencies WQA	\$830,000	\$300,000	\$1,130,000	\$3,295,830	\$4,125,830		WQA
Subtotal	All Agencies FAWA						\$48,000	FAWA
Subtotal	All Agencies SBICA		\$1,000,000	\$1,000,000				SBICA
Subtotal	All Agencies SDPA				\$223,782	\$223,782		SDPA
Subtotal	All Agencies WQA Capital		\$840,000	\$840,000	\$840,000	\$840,000		WQA Capital
Total	All Agencies. All Funds	\$27,671,873	\$20,739,362	\$48,411,235	\$3,161,759	\$30,833,632	\$55,845,000	

Table 3. Final 2001-2003 Biennium Budget, by Program

Work Plan Program	Continued 1999-2001 Proviso Funds	Action Team Recommendations for 2001-2003		Final Legislative Budget Appropriations for 2001-2003		Non-Proviso Funds Being Reported by Agencies
		Proviso Adjustments	Proviso Total	Proviso Adjustments	Proviso Total	
Puget Sound/Georgia Basin Shared Waters						
Management of Aquatic Nuisance Species	\$256,958	\$37,500	\$294,458		\$256,958	\$48,000
Puget Sound Estuary Management	\$1,391,452		\$1,391,452		\$1,391,452	
Protection of Wetlands and Habitat for Fish and Wildlife	\$2,881,104	\$6,198,555	\$9,079,659	-\$235,600	\$2,645,504	\$18,000,000
Spill Prevention and Response	\$2,240,000	\$3,330,100	\$5,570,100	\$1,700,000	\$3,940,000	
Puget Sound Monitoring and Research	\$6,371,739	\$5,459,059	\$11,830,798	\$639,359	\$7,011,098	
Education and Public Involvement	\$2,971,233	\$900,000	\$3,871,233	\$18,000	\$2,989,233	
Local Watershed Management	\$73,000		\$73,000		\$73,000	
On-site Sewage System Management	\$1,273,900		\$1,273,900		\$1,273,900	
Agricultural Practices and Forest Practices	\$1,338,511	\$3,008,548	\$4,347,059	\$840,000	\$2,178,511	
Marinas and Boaters	\$189,000		\$189,000		\$189,000	\$525,000
Shellfish Protection	\$1,721,834		\$1,721,834		\$1,721,834	
Contaminated Sediments and Dredging	\$1,696,560		\$1,696,560		\$1,696,560	\$602,000
Municipal and Industrial Discharges	\$3,762,674		\$3,762,674		\$3,762,674	
Stormwater Management and Combined Sewer Overflows	\$1,503,908	\$1,805,600	\$3,309,508	\$200,000	\$1,703,908	\$36,670,000
Total All Programs	\$27,671,873	\$20,739,362	\$48,411,235	\$3,161,759	\$30,833,632	\$55,845,000

Implementers Index

STATE AGENCIES	Page
CONSERVATION COMMISSION	
Local Watershed Plans	38
DEPARTMENT OF FISH and WILDLIFE	
Marine and Freshwater Habitat Protection	15
Shellfish Protection.....	21
Aquatic Nuisance Species.....	41
Puget Sound/Georgia Basin Shared Waters.....	49, 50
Monitoring Research and Laboratory Support	57, 58
Contaminated Sediments and Dredging.....	69, 70
DEPARTMENT OF NATURAL RESOURCES	
Marine and Freshwater Habitat Protection	15
Puget Sound/Georgia Basin Shared Waters.....	50
Monitoring Research and Laboratory Support	57, 58, 59
Forest Practices	65
Contaminated Sediments and Dredging.....	69, 70, 71
DEPARTMENT OF AGRICULTURE	
Local Watershed Plans	38
Aquatic Nuisance Species.....	41
Agricultural Practices.....	63
DEPARTMENT OF ECOLOGY	
Marine and Freshwater Habitat Protection	16
Shellfish Protection.....	21, 22, 23
Stormwater and Combined Sewer Overflows	28
Municipal and Industrial Discharges	32
Local Watershed Plans	38
Aquatic Nuisance Species.....	42
Puget Sound/Georgia Basin Shared Waters.....	49, 50, 52
Spill Prevention and Response	54
Monitoring Research and Laboratory Support	57, 59, 60
Agricultural Practices.....	63
Marinas and Boaters	67
Contaminated Sediments and Dredging.....	69, 70, 71, 72
DEPARTMENT OF HEALTH	
Shellfish Protection.....	21, 22, 23, 24
On-site Sewage Systems	34, 35
Education and Public Involvement	45
Puget Sound/Georgia Basin Shared Waters.....	50, 51
Monitoring Research and Laboratory Support	57, 60, 61

STATE AGENCIES	Page
OFFICE OF COMMUNITY DEVELOPMENT	
Marine and Freshwater Habitat Protection	17
Education and Public Involvement	46
WASHINGTON STATE DEPARTMENT OF TRANSPORTATION	
Marine and Freshwater Habitat Protection	16, 17
Stormwater and Combined Sewer Overflows	28, 29
Contaminated Sediments and Dredging.....	69, 71, 72, 73
STATE PARKS and RECREATION COMMISSION	
Marinas and Boaters	67
PUGET SOUND WATER QUALITY ACTION TEAM	
Puget Sound Estuary Management.....	11, 12
Marine and Freshwater Habitat Protection	18
Shellfish Protection.....	21, 22
Stormwater and Combined Sewer Overflows	29
On-site Sewage Systems	35
Local Watershed Plans	38
Aquatic Nuisance Species.....	42, 43
Education and Public Involvement	45, 46
Puget Sound/Georgia Basin Shared Waters.....	49, 50, 51
Monitoring Research and Laboratory Support	57, 61
Marinas and Boaters	67
Contaminated Sediments and Dredging.....	69, 70, 71
UNIVERSITY OF WASHINGTON, WASHINGTON SEA GRANT PROGRAM	
Education and Public Involvement	47
Spill Prevention and Response	55
WASHINGTON STATE UNIVERSITY, COOPERATIVE EXTENSION	
Shellfish Protection.....	21
Education and Public Involvement	47
LOCAL GOVERNMENT ACTIONS	Page
Marine and Freshwater Habitat Protection	19
Shellfish Protection.....	25
Stormwater and Combined Sewer Overflows	30
On-site Sewage Systems	36
Local Watershed Plans	39